

AN EVALUATION RESOURCE BOOK FOR
PUBLIC LEGAL EDUCATION AND INFORMATION ORGANIZATIONS

This report was prepared for the Department of Justice by the Canadian Law Information Council. The researchers for the Council were Janet Currie and Tim Roberts, principals of Focus Consultants.

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Published by Authority of the
Minister of Justice and Attorney General of Canada,
Government of Canada

Communications and Public Affairs
Department of Justice Canada
Ottawa, Ontario
K1A 0H8
(613)995-2569

Également disponible en français

© Minister of Supply and Services Canada 1986

Printed in Canada

JUS-P-364

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ACKNOWLEDGEMENTS

We should like to thank the following persons for their assistance in the development of this resource book.

Gail Dykstra, Director of the Legal Information Secretariat of the Canadian Law Information Council, who conceived of and secured funds for both phases of this project; who provided supportive criticism (and much praise) as the writing went on; who negotiated extensions as the writing kept going on; and who maintained good humour throughout this process.

Louise Abdelahad, Research and Statistics Division, Department of Justice of Canada, who arranged funding for Phase II of this project; who provided supportive criticisms (and much praise) as the writing went on; who agreed to extensions as the writing kept going on; and who maintained good humour throughout.

Dr. Wes Shera, School of Social Work at the University of Victoria, who provided us with large numbers of useful reference materials that he had accumulated for his own course on evaluation.

John Pyl, of the Canadian Law Information Council, who offered to work up examples using various statistical tests, and provided them on very short notice (see Module V).

Anthony Beks, Capital Stenographic Services in Victoria, who word processed an avalanche of copy in a very short time; and who complained only once, when he noticed that the text of the draft of this resource book stated that typewritten copy looks nicer than word processed copy (a comment that we have since edited out).

Some 50 individuals and groups involved in PLEI across Canada that we contacted during Phase I of this project, and whose problems, solutions and written material we have tried to incorporate in this resource book.

A PARABLE

There was once in a far-away land a queen who wished to do good by spreading knowledge among her people of the laws and legal processes of her country. She gathered about her a band of citizens called Public Legal Education Warriors (PLEWs) to assist her in this task. They were dedicated persons all, who went forth throughout the land to put an end to legal ignorance and injustice.

After several years the queen desired to know what value could be placed on her PLEWs' accomplishments, but was puzzled as to how to undertake this task of valuing.

At this time a messenger came to the queen's court bearing news of an enormous beast that had entered the outlying forests of her kingdom. Gentle reader, this beast resembled what is commonly called an elephant, but lacking knowledge of such animals, the villagers had called the beast EVALUATION. On hearing this, the queen felt sure that EVALUATION had been sent to her by Providence to assist her in putting a value to the worth of her PLEWs. She determined to experience what EVALUATION was all about, and for this purpose assembled her five wisest councillors. She ordered that each should enter the terrain of EVALUATION blindfolded. (She had been told that EVALUATION had to be experienced to be believed, and that sight was prejudicial to complete insight.) Each councillor would then report back to her of their experience with the beast.

The first knotted his blindfold and groped his way to a clearing where the beast was browsing. Unfortunately he ventured too close to the beast's enormous leg, was bowled over and then found himself pinned beneath the beast. With considerable effort he pried himself free and crawled for several hours back to the court where he removed his blindfold, collapsed before the queen and said, "Your majesty, EVALUATION is a most heavy experience. Indeed I must call it crushing, and would not venture upon such an experience again without a retinue of warriors."

The second councillor was more fortunate. She had walked for half a day in tropical heat to the beast's clearing. Beads of perspiration rolled down her brow into her blindfold as she approached the beast, hands outstretched. But she never touched the body of EVALUATION because as she drew near, the beast flapped its ears, sending strong breezes over the councillor's body. On returning to the queen, the councillor reported serenely, "EVALUATION is like a breath of fresh air, your Majesty. It cools out the most heated situations, and makes everything seem breezy and clear."

The third councillor made the great mistake of approaching the tail end of the beast, just as EVALUATION decided to relieve itself. Several hours later the despairing man, having been given no assistance on his return journey, appeared smelly, wet and filthy before the astonished queen. He hurled down his blindfold in disgust and said, "Your Majesty, EVALUATION stinks. It seems to digest everything that is rotten and irrelevant and drops it all over the head of the innocent."

The beast picked up the fourth councillor with its trunk and playfully swung her in the air before depositing her again on the ground. On arriving before the queen the councillor appeared perplexed. She removed her blindfold and said, "Your Majesty, EVALUATION is a gripping experience. It can be exhilarating at times, and takes you along at great speed, but at the end you encounter the most frightful knocks."

The last councillor approached the beast without mishap. He gingerly held onto the beast's quarled skin and made his way up its leg. With considerable effort he scaled the back of the beast and sat down on top. He stayed there for some time, enjoying the gentle motion of the beast and feeling its great heartbeat. Upon realighting he made his way back to the court and removed his blindfold. "Your Majesty," he reported, "EVALUATION is at times exceedingly hard to hold on to, but if you succeed in doing so, it appears to offer a different perspective on daily existence -- even for the blindfolded."

"Clearly," mused the queen, "EVALUATION is many different things to different people." Her councillors spent many weeks distilling the essence of their experiences with EVALUATION and applied them with wisdom and compassion to the activities of her PLEW warriors. And lo, the warriors went forth with renewed energy and confidence and public legal ignorance was banished from the land.

HOW TO USE THIS RESOURCEBOOK



HOW TO USE THIS RESOURCEBOOK

1. THE PURPOSE OF THIS RESOURCEBOOK

This Resourcebook has been created for public legal education and information (PLEI) groups in order to help them understand and do better evaluations. There are at least 500 programs in Canada which provide legal information to Canadians. Some are totally PLEI oriented, others are multi-purpose, providing public legal education as only one part of their mandate. This Resourcebook has been designed to deal with the evaluation needs of staff from large quasi-government PLEI organizations to small experimental programs; from well-developed programs with long histories to short-term focussed projects.

Obviously, the evaluation skills and information needed by each type of PLEI group will differ. Newly formed PLEI groups may want answers to questions such as "What kinds of legal needs exist in our area?" (needs assessment), or "How can we more effectively distribute our publications?" (materials assessment). Older, more well-established groups may want to review the impact of their work on specific target groups, such as low income groups or new Canadians (impact analysis). They may be concerned with overall program review (program evaluation). To meet these varying needs, this Resourcebook has been broken up into a series of MODULES, each focussing on an aspect of evaluation. The modules are divided into specific subject areas. This means that you can reach into the Resourcebook for whatever skills or information you need. For example, if you want to know how to develop better questionnaires you would move to Module IV, Section 2.0. If you wanted to consider the merits of hiring an outside (external) evaluator as opposed to doing the evaluation internally, then Module II has the information.

This Resourcebook was designed with the direct input of PLEI program staff across Canada. They were asked to describe their evaluation experiences and needs and to define the specific evaluation skills they

wanted to acquire. They were also asked to contribute evaluation ideas that worked for them. It was on the basis of this practical experience with evaluation by PLEI groups that this Resourcebook was developed. It reflects the major concerns of many of those working in the PLEI field -- we hope it reflects yours.

2. USING THE RESOURCEBOOK

The Resourcebook has been designed into MODULES and SECTIONS in order to give you easy access to the information. To find the information you require

DETERMINE YOUR TOPIC

CONSULT THE INDEX OR TABLE OF CONTENTS
TO GET THE MODULE AND SECTION NUMBER

MOVE TO THE SPECIFIC MODULES AND SECTIONS

Although each Module has been designed to "Stand alone", some evaluation issues are complex and may be covered in more than one module or section. It is particularly recommended that you read Module I -- Planning Your Evaluation -- before you do your evaluation.

3. SOME TYPICAL EVALUATION QUESTIONS: WHERE TO FIND THE ANSWERS

Here are some of the most common evaluation questions of PLEI staff and where to find the information:

QUESTION	MODULE & SECTION
1. How do we figure out workable goals and objectives?	in Module I: Planning Your Evaluation
2. We don't want to hire an outside evaluator. Is it feasible for us to do our own review?	in Module I: Planning Your Evaluation
3. How can we find a good external evaluator?	in Module II: Using an Evaluation Consultant
4. How can we look at the impact of our work in a more profound way? In other words, what effect does the legal information we provide really have?	in Module III: Types of Evaluation You Can Do (Impact Assessment)
5. How can we measure cost-effectiveness?	in Module III: Types of Evaluation You Can Do
6. How can we evaluate non-print PLEI material?	in Module III: Types of Evaluation You Can Do (Material Assessment)
7. How can we figure out what the legal needs in our community are?	in Module III: Types of Evaluation You Can Do (Needs Assessment)
8. How can we improve our questionnaire?	in Module IV: Gathering the Data (Questionnaire)

4. CASE EXAMPLES

This Resourcebook contains many examples of PLEI evaluations. Many of these are actual experiences of Canadian PLEI groups, although we have changed details to protect the anonymity of our sources. Other are composites of experiences of several groups. In these cases we have invented the names of PLEI programs. For real examples of PLEI evaluations we suggest you obtain the CLIC Abstracts on Public Legal Education and Information (PLEI) Research from the Canadian Law Information Council. These abstracts describe PLEI evaluations and research from North American Groups, and include annual updates.

MODULE I

PLANNING YOUR EVALUATION



MODULE I

PLANNING YOUR EVALUATION

TABLE OF CONTENTS

1. What is evaluation?
2. The purposes of evaluation
3. Who decides whether to do an evaluation?
4. Defining the purpose of your evaluation
5. Assessing your organization's capacity to do evaluation
6. Setting up a structure to handle evaluation
7. Allocating resources
8. Developing a time frame
9. Who will do the evaluation: An internal (staff) evaluator or an external evaluator?
10. Establishing a budget for an evaluation
11. Cutting evaluation costs
12. What should your evaluation be based on: Problems or goals?
13. Goal oriented approach
 - 13.1 Description
 - 13.2 Limitations of the approach
14. Problem oriented approach
15. A combined approach: The ideal?
16. How to write mission statements, goals and objectives
17. How to develop evaluation goals and objectives
18. How to carry out the problem oriented approach to evaluation



1. WHAT IS EVALUATION?

We've been doing the same legal workshop for seniors for five years now. Everyone seems to like it but I wonder if we shouldn't be trying to do something different.

When our budget was cut so drastically we had to prioritize. Right now we need to know who we should direct our services to.

I'd love to know who really watches our television programs on "You and the Law." What do they do with the information they receive?

Although it is difficult to define evaluation in a single sentence, each of the above comments reflects a need for evaluation. To some, evaluation is the determination of whether specific program goals have been achieved or not achieved. To others evaluation describes the costs and benefits of different approaches, methods or programs. To still others, evaluation implies looking at the overall impact of a program in terms of expected and unexpected outcomes. Evaluation may concern the ultimate value or worth of a program to its clientele or community.

It is likely that your evaluation will combine many purposes and goals. Some may be explicit but others may not. There may or may not be consensus on the purpose of the evaluation within your organization. For example, as co-ordinator of a legal education program you may want to learn how to improve your program. A government funder may be looking at the evaluation results as a way to cut costs or to reprioritize program goals.

2. THE PURPOSE OF EVALUATION

Before you embark upon an evaluation it is important to clarify the major reasons for doing it. Some of the most common are:

(a) To do program planning and make program decisions: Program staff and administrators may wish to use evaluation findings in order to assess whether to continue, add or drop programs. New budget considerations may

have made it necessary to reprioritize goals. There may be new public legal education needs surfacing in the community which need to be looked at (e.g. Charter of Rights and Freedoms issues, Young Offender legislation).

(b) To improve services: There may be uncertainty about the effectiveness of certain programs or services. How can they be improved? Can staff be deployed in other ways? For example, a PLEI worker we spoke to wanted to know whether the field contacts she needed to make (which involved travel, time and expense) could be handled in a different way.

(c) To deal with a specific problem area: Sometimes evaluation is used to look at a specific problem area within an organization. Why aren't members of ethnic groups attending legal workshops? Why are libraries in a particular region not carrying legal materials?

(d) To carry out overall program review: Evaluation does not have to be problem oriented. Just as we submit to regular medical exams or tests when we're not sick, PLEI organizations may find it helpful to review their goals, approach, costs, impact and effectiveness at periodic intervals. e.g. How well is the Board functioning? Is the structure of the organization the most effective? The resulting evaluation may produce new insights and new directions or open up problem areas, or it may simply affirm the general direction of the program.

(e) To justify programs: As government restraint policies affect PLEI programs, evaluation is being used to justify, defend or explain the program. Funders may wish to know, for example, how legal information is being used by the public and what its impact has been. The costs and benefits of specific programs may be questioned.

(f) To assess personnel needs and impact: Evaluations may be specifically directed towards the needs and effectiveness of staff. Have staff been sufficiently trained to deal with the needs of their clientele? Are job descriptions being followed? Are they adequate? Are hiring procedures fair?

(g) To explore new knowledge: Evaluations may be done to look at programs in an exploratory way. They may be a useful means to look at the unexpected results of innovative legal education programs; for example, using puppetry for younger children to explain the law.

3. WHO DECIDES WHETHER TO DO AN EVALUATION?

A lot of confusion around evaluation results from the fact that people inside and outside the organization have different purposes in mind.

FUNDERS MAY WANT TO KNOW

What the costs-benefits of the program are.
What the impact of the program is.
Whether the program is duplicating another service.

BOARD MEMBERS MAY WANT TO KNOW

Whether the program is meeting its stated goals.
Whether the community is responding favourably to the program.

PROGRAM ADMINISTRATORS MAY WANT TO KNOW

Whether staff are being deployed effectively.
Whether goals are being met.
What the program's problem areas are.

STAFF MAY WANT TO KNOW

What the results of their work are.
Whether their clients are fully utilizing their services.

The people who are most concerned about the program and its effectiveness are often called STAKEHOLDERS.

STAKEHOLDERS may include people in the community, clients of the program and political figures, as well as funders, program staff and administrators. It is not always possible or appropriate for all the stakeholders in the program to be consulted whenever an evaluation is carried out. For example, the staff may be assessing how they manage their

time. This would not be of interest to the community. But it is important to consult with the major stakeholders interested in the evaluation process or results when the evaluation is being discussed.

4. DEFINING THE PURPOSE OF YOUR EVALUATION

Not all PLEI groups contemplating evaluations will be able to define their own evaluation. In some cases, where a program evaluation has been mandated by a funder or by government, the purposes, goals, methodology and personnel may be imposed on the group without much input from the program staff. In these cases it is still important for program staff to try to negotiate the purpose or goals of the evaluation with the evaluators or funders requiring it. When the program staff have at least some evaluation control, here are some ways of eliciting opinions on the overall evaluation purpose.

TABLE 1: DEFINING THE PURPOSE OF THE EVALUATION

- | |
|--|
| <p>A. Ask key people inside and outside the organization to respond (in writing) to one or two questions such as:</p> <ul style="list-style-type: none">- Do we need an evaluation and why?- We need to evaluate this project because... <p>B. Write down a list of evaluation purposes, then prioritize according to importance. These may be issues such as:</p> <ul style="list-style-type: none">- How to use staff time more effectively.- How to assess the value of audio-visual approaches.- How to assess the value of legal forums.- How to determine whether clients use legal information and how. <p>C. Call in key staff and administrators to brainstorm about the purpose and value of doing an evaluation. Accept ideas (with no criticism) for 15 minutes, then through discussion, try to reduce the ideas to a few basic ones.</p> <p>D. Ask clients to have input by handing out a card with a question on it.</p> <ul style="list-style-type: none">- The main problem I see with the Seniors Law Project is that... |
|--|

It may not be easy to get people to help define the purpose of an evaluation but research data suggest that there will be more commitment to the evaluation if participation begins early.

5. ASSESSING YOUR ORGANIZATION'S CAPACITY TO DO EVALUATION

Evaluation can range from simple internal review or monitoring of a specific program component to a large scale evaluation of the total program and its impact. Each type of evaluation requires a different degree of readiness, commitment and organizational capacity (see Table 2). The capacity of an organization to undertake an evaluation in turn determines whether the evaluation can be done internally (by staff or board), by an external evaluator, or by a combination of both.

In some cases an organization has neither the capacity nor the interest to do an evaluation, but the evaluation is still a requirement. If this is the case the evaluation process may be a rocky one and the results may be under-utilized.

We didn't want to do the evaluation but it was a requirement of funding. We tried to make it relevant by asking the evaluators to look at a few areas we were interested in but all in all it was a waste of time and money.

Remember that evaluation is often political in nature (i.e. evaluation will serve different, and some times competing, interest groups). You may be able to shape its purpose and content to some degree but not control it entirely.

TABLE 2: ASSESSING YOUR ORGANIZATION'S CAPACITY TO EVALUATE

Consider the following questions and check the appropriate answers	Substantial or to a great degree	Some	Very Little	None
a) How would you describe the financial resources available for this evaluation? b) To what degree do you have information on who is interested in this evaluation and why? c) Will this evaluation provide practical information for the functioning of your program? d) To what degree is this evaluation important or essential for the continuation of your program? e) To what degree does your organization keep basic client, outreach, etc. records? f) To what degree can key staff assist with the evaluation process? g) To what degree do key staff possess specific evaluation skills? (eq. in questionnaire design, observation etc.)				
TYPE OF EVALUATION FOR WHICH YOUR ORGANIZATION <u>MAY</u> HAVE THE CAPACITY*	Large Scale program evaluation Impact Study	Needs assessment Evaluation of program component Feasibility study	Internal monitoring or review of program component General feedback Think-tank sessions	Reassess your need to do evaluation
*NOTE: 1. If your responses cut across specific categories, attempt to expand your organization's capacities before embarking upon an evaluation, e.g. by improving record keeping or discussing with staff the value of evaluation or checking further with funding sources. 2. The less capacity and commitment your organization has for evaluation, and the more ambitious the evaluation is, the more likely you will require assistance from an external evaluator.				

Adapted from American Council of Voluntary Agencies for Foreign Service, 1983:28.

6. SETTING UP A STRUCTURE TO HANDLE EVALUATION

Whether your organization does an internal review or hires an external evaluator, there should be a structure developed within the organization to co-ordinate evaluation tasks or follow the evaluation process through. This evaluation committee should be small (no more than 5 members) and consist of staff, clients, board members or administrators who have some commitment to and interest in the evaluation process. The committee may be formed after your organization has determined the need for an evaluation, or later in the process. It is helpful to have staff with some evaluation expertise on the committee. The tasks of the committee need to be clarified and could include:-

- assessing the need for evaluation
- determining who will do the evaluation
- attending to evaluation budget matters
- hiring the evaluator
- feeding in the organization's evaluation objectives to the evaluator
- monitoring evaluation process
- carrying out specific tasks related to the evaluation (e.g. seeing that staff distribute questionnaires)
- explaining evaluation purpose to staff
- providing input into evaluation design
- reviewing evaluation drafts or materials
- developing a model for the utilization of evaluation

Not all of these tasks may be appropriately handled by a committee. However, in order for an evaluation to be accepted and utilized, staff, board and administrators must have a stake in the process.

7. ALLOCATING RESOURCES

If you are handling an evaluation internally it is important to plan the utilization of staff time and finances carefully. Most groups consistently underestimate the amount of time to carry out an evaluation, even a simple internal review of a program. The following outline is one way of clarifying the kinds of time and staff resources needed to do an evaluation for a Youth and Law Information program.

TABLE 3: TIME AND RESOURCES PLAN FOR EVALUATION OF YOUTH AND LAW INFORMATION PROGRAM*

Activities	Time required	Staff
1. Reviewing program goals - reading documents and reports - interviewing staff and program director - attending program	5 days	Kathy Evans - Researcher
2. Determining goals - meeting with staff, clients and evaluation subcommittee	2 days	Kathy Evans
3. Developing design	5 days	Kathy Evans
4. Developing questionnaire for clients and agency personnel	2 days	Kathy Evans Mike Bernotti
5. Administering questionnaire	7 days	Mike Bernotti Daniele Paquette
6. Analyzing data	3 days	Mike & Daniele
7. Preparing evaluation draft	5 days	Kathy Evans
8. Preparing final report	4 days	Kathy Evans
9. Preparing plan for utilization	2 days	Advisory Board

*Note this is a sample only, not a prescription. Different time allocations will be required for particular activities depending on the size and nature of each evaluation.

8. DEVELOPING A TIME FRAME

To carry out the evaluation more efficiently it is useful to chart all the major evaluation activities on a time log. This enables administrators to visualize when tasks will begin and end or how staff will be used. A sample timelog is reproduced below.

TABLE 4: SAMPLE TIMELOG FOR EVALUATION PROJECT							
Tasks	Months						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1. Discussion with Stakeholders on what to evaluate	xxxx xxxx						
2. Develop data collection methods		xxxxx xxxxx					
3. Define sample		xx					
4. Do pretest			xx				
5. Analyze pretest			xx				
6. Collect data				xxxx	xxxx		
7. Analyze data					xxxx	x	
8. Write final report						xxxx	
9. Present report, discuss utilization							xxxx xxxx

9. WHO WILL DO THE EVALUATION: AN INTERNAL (STAFF) EVALUATOR OR AN EXTERNAL EVALUATOR?

Deciding on whether to hire an external evaluator or use an internal process depends not only on factors such as the organization's capacity to evaluate but also on what kind of perspective you want. The advantages and disadvantages of each approach should be considered.

TABLE 5: USING INSIDE OR OUTSIDE EVALUATORS: ADVANTAGES AND DISADVANTAGES

INSIDE EVALUATOR	
<u>Advantages:</u> More familiar with the setting. Established relationships and trust with staff, clients, etc. Understands channels of communications within the organization and the community. Intimate knowledge of the details of the program or problem. Interest in success of the program. Realistic expectations of the uses and implications of the evaluation. Cheaper because hiring of outside expert is not needed. Results more likely to be used internally.	<u>Disadvantages:</u> May have vested interest in the program and evaluation findings. May reflect the biases of staff in the design and reporting of the evaluation. May not have adequate time for evaluation due to other requirements. May not have sufficient skills and knowledge of evaluation. May be more inclined to ignore negatives or problems in the program. May lack credibility within organization if identified with a particular group.
OUTSIDE EVALUATOR	
<u>Advantages:</u> Likely to have more skill and knowledge in evaluation. More objective. Less likely to have a vested interest in the outcome. Has the time to focus on evaluation. May provide greater credibility (i.e. to government, the public or funders).	<u>Disadvantages:</u> Takes much longer to become familiar with the program and evaluation needs. Likely will never have as full an understanding of the program. Lacks the ongoing relationships and trust with the staff, clients, etc. Has a time schedule which may not be appropriate for program staff and/or their requirements. Higher costs. May meet with resistance from staff and clients. Evaluation results may be less likely to be utilized internally.

(Adapted from evaluation material developed by Wes Shera, University of Victoria.)

While most groups should be able to develop and implement some regular or focussed program review on their own (for example, the monitoring of client satisfaction for those attending law information forums), it is more difficult for groups to manage more comprehensive evaluations totally on their own. However, it is not always necessary to hire a consultant to do the entire evaluation. For example, a consultant might be hired to help define an evaluation purpose, develop a methodology, and train volunteers to do the data collecting. A staff member could analyze the data and write the report. An evaluation consultant could be hired for one or two days to help you set up a way of doing a needs assessment or to review the questionnaires you are handing out to workshop participants.

Whenever we do a workshop I take our questionnaires to a friend at the university who specializes in evaluation and has worked with community groups. He always provides useful input.

10. ESTABLISHING A BUDGET FOR AN EVALUATION

Whether an evaluation is carried out externally or internally, your organization must make a preliminary assessment of costs. If staff carry out an internal evaluation then they will not be available to do their regular work. This may result in overtime costs, hiring of temporary help or reorganizing the work. If the evaluation is done by an external evaluator he or she will be expected to submit a budget covering evaluation items. The following are items which usually must be covered in an evaluation:

- consultants' fees (if any)
- postage/mailing (especially if doing mail-out questionnaires)
- copying
- printing of final report
- telephone (may be substantial if doing long distance surveys)
- office space (may or may not apply)
- office equipment (e.g. typewriter)

- support services, typing (e.g. secretarial)
- computer time
- travel expenses (meals, transportation, gas)

Cost may vary widely in some areas. Usually consultants charge on a per diem (per day) basis but some may settle for a flat rate. Consultants' fees vary according to the length of the contract (most consultants charge more for short term contracts), their level of background and whether or not they work privately or with a firm. It is not always true that high fees result in a better consultant (he may simply have more overhead expenses). At the same time, deciding on the lowest bidder is not always the best idea.

... good consulting is expensive and it is rare that you get more than you pay for.... If you make it known that you will select based on lowest cost, a consultant who wants to get the contract will bid low, but s/he will have to cut corners in the study to make out.

(Dexter and Schwab, 1975: 83)

To assess whether the fee estimates are fair, check around with other social programs in your community, at a local agency, with other comparable PLEI organizations or with government departments which act as consultants.

11. CUTTING EVALUATION COSTS

When PLEI groups contemplate doing an evaluation they sometimes see large scale, comprehensive evaluations as the only alternative. However, such plans may be unrealistic in terms of budget, time, or resource constraints.

We wanted to have an external consultant do an overall evaluation of the organization, but the province has cut back on our funding, and we simply don't have the money. So our board has decided to do the evaluation itself, and is focussing on the most important problem, which is our staffing structure.

PLEI is a fairly new field, and in many instances funders want to ask a lot of questions about all aspects of the program, and are willing to provide money to get the necessary answers. On the other hand, funders may see extensive data collection as a waste of time and money:

One major PLEI organization produced voluminous records on all aspects of its program for government and funders. But the reaction to all this information wasn't always positive. Funders felt they were being overwhelmed with statistics. There was little focus and interpretation. Most people could not even be bothered to read through all the material.

Whatever your requirements, there are some simple ways of reducing costs when planning an evaluation.

- Do a literature review of other programs to help focus your evaluation questions so that you are not gathering information which has already been collected. (See the reference to the CLIC Abstracts in the bibliography).
- Consult with other PLEI programs to focus evaluation objectives further.
- Consider sampling the population to be studied rather than studying the total population.
- Use cheaper help to do parts of the study (e.g. volunteers or students to do telephone surveys or questionnaires or to code and tabulate data).
- Avoid some of the more time consuming methods of gathering data (e.g. interviews may require considerable time to code).

12. WHAT SHOULD THE EVALUATION BE BASED ON -- PROBLEMS OR GOALS?

There are two main ways to focus your evaluation questions. One is the goal oriented approach, the other is the problem oriented approach. Each has specific uses but they may be used in combination. Which approach you choose will depend on many factors -- the issues you are concerned about, how well developed your program goals are, the data collection methods you are most comfortable using and the demands of funders or others. The sections below will provide information which should enable you to choose the most appropriate approach.

13. GOAL ORIENTED APPROACH

13.1 Description

Until recent years this has been the "traditional" way to do a program evaluation. Goal based evaluation is based on three premises:

- a) An organization has clearly stated program goals and exists in order to achieve them.
- b) The organization has developed a rational procedure for achieving these goals.
- c) The organization can be evaluated in terms of how well these goals have been attained.

Organizations which base their evaluation on goals either have clearly stated goals and objectives or are willing to spend time clarifying or defining them. Clarifying goals can be a meaningful process as long as there is an agreement on what a goal or objective is, and as long as there are some commonly understood goals within the organization.

The KINDS of questions which are usually addressed in a goal based evaluation are the following:

- How well are we meeting our goals?
- Are we meeting all the goals we said we would?

- Are there any goals which we are meeting that we did not anticipate?
- Should some of our program goals be changed?

An advantage of the goal oriented approach is that it is a well defined method which is understandable to most people. It is relatively concrete and this may appeal to funders and administrators. The process of discussing goals may be helpful for staff, enabling them to review and define their programs in a more concrete way.

13.2 Limitations of the approach

There are problems which result from relying totally on goals as the basis for an evaluation. Many programs do not have clearly specified goals or objectives. There may be disagreements among program staff and administrators over program goals. Goals may also change throughout the life of the organization or be reprioritized.

Not all of an organization's decisions or activities can be fitted into a goal oriented approach. For example, many aspects of an organization's life -- staff conflict, team functioning, etc, do not lend themselves to goals. Other descriptive questions such as "Who does our program really serve?" "What does the target group find helpful?" and "What is the impact of PLEI on their lives?" -- may not even be DIRECTLY linked to the achievement of goals. Yet these may be the questions of most value in an evaluation.

FOR MORE INFORMATION ON USING THE GOAL ORIENTED
APPROACH AND SETTING EVALUATION GOALS AND OBJECTIVES,
SEE SECTION 16

14. PROBLEM ORIENTED APPROACH

The problem oriented approach describes what is REALLY HAPPENING in the program rather than focussing on what program goals say SHOULD happen. In this approach the evaluator works with staff to look at issues they are most concerned with such as:

- Which of our clients really use PLEI information in their lives?
How is it used?
- How can we increase our staff efficiency when we are faced with budget cuts?
- Who watches our audio-visual presentations?

By looking at "what is actually happening" in a program (rather than what SHOULD happen) the evaluator is likely to view the program more comprehensively and be more able to record changes in direction or focus.

FOR MORE INFORMATION ON HOW TO USE THE PROBLEM
ORIENTED APPROACH SEE SECTION 18

15. A COMBINED APPROACH: THE IDEAL?

A rigid goal defined evaluation is often not appropriate for PLEI programs. PLEI programs are often oriented to particular target groups and thus subject to change and redirection if new target groups emerge. The larger programs are complex and operate at many different levels. There is no single set of goals and objectives to clearly define their activities. A goal defined approach is restricting and might neglect many of the activities taking place in the program.

However, to ignore goals entirely in favour of a completely descriptive evaluation could be a mistake in the other direction. Most programs do have purposes and goals which offer a general direction. Otherwise they would operate in a completely ad hoc way. We recommend that programs consider goals and objectives NOT AS A RIGID FRAMEWORK but as another piece

of information to be taken into account during the evaluation process, and that the focus also be on problems and issues as defined by staff and others (stakeholders).

16. HOW TO WRITE MISSION STATEMENTS, GOALS AND OBJECTIVES

There may be no more deadly way to begin a program staff meeting than by stating that the purpose of the meeting is to identify and clarify program goals and objectives. If evaluators are second only to tax collectors in the hearts of program staff, I suspect that it is not because staff fear evaluators' judgements about program success, but because they hate constant questioning about goals. [Patton, 1978:98]

The definition and clarification of program and evaluation goals and objectives may be tedious and frustrating. There is no exact definition of a goal or objective, and evaluators (especially) can get hung up on specifying technically perfect objectives. Instead of worrying about developing technically perfect goals and objectives, try instead to develop those which have meaning to your organization and which can be measured in some way.

If your evaluation is going to be based on goals and objectives we recommend that you approach the process in two stages:

1. Define, reclarify or reorganize your program goals and objectives first. FOCUS ONLY ON THE PROGRAM GOALS AND OBJECTIVES ABOUT WHICH YOU HAVE CONCERNS AND WISH TO EVALUATE.
2. From these program goals and objectives develop your evaluation goals and objectives. They will provide the basis for the evaluation study.

The difference between overall goals (sometimes called MISSION STATEMENTS), goals and objectives is relative. Goals are broad statements of objectives which tend to be narrower and more precise. Some organizations have three levels: (1) mission statements (2) goals and (3) objectives. Others use only two: (1) goals and (2) objectives. Often mission statements and goals are interchangeable. Mission statements are most useful when a program has many goals.

Following are some ways to help you define mission statements, goals and objectives.

A MISSION STATEMENT

- is a broad statement of the purpose of the program or its ultimate value.
- includes what you want to achieve.
- includes the name of your clients or target group.
- includes the general approach to be used.
- includes issues to be addressed.

Example: The Alberta Legal Information Council will increase legal literacy among the public in the province.

A PROGRAM GOAL

- is a general statement which describes the overall direction of a program or program component
- describes the desired end result.
- describes target population.
- describes the issue to be addressed.

Example: The Alberta Legal Information Council will provide all high School students in the province with access to information on the Young Offenders Legislation in order to increase their awareness of the changes in Legislation.

A PROGRAM OBJECTIVE

- stems from the goal(s) but is more specific.
- specifies how the goal will be reached.
- is measurable.

Example: ALIC will produce a videotape describing the Young Offender Legislation and its implications which will be available to all high schools by October, 1985.

A HINT FOR DEVELOPING GOALS

One way to develop program goals is to define the problem your organization is addressing, then invert the problem to arrive at the program goal.

Sample Problem: New immigrants in Vancouver are not aware of Canadian laws and tend to be intimidated by the judicial structure.

Sample Goal: The Vancouver Legal Access Society will direct legal information towards new Canadians so that they can become better informed about basic Canadian laws and feel comfortable utilizing the judicial process.

SOME HINTS FOR DEVELOPING OBJECTIVES

- Objectives should state only one aim or purpose.

WRONG: The Montreal Gay Rights Society will hire a public legal worker to develop law information sessions on gay legal rights for members of the Montreal Gay Community and will publish a manual on "Legal Rights for Gays" which will be distributed to all gay organization and resources.

[This contains TWO objectives which should be separated because they may be evaluated differently.]

- Some evaluators differentiate between two types of objectives.
 - a. OPERATIONAL OBJECTIVES deal with the day to day operations of the organization, such as how work is organized, how clients' needs are assessed, the relationship of central office to field staff, etc. (These would be more useful if your organization was undertaking an internal review.)
 - b. IMPACT OBJECTIVES specify the outcome of the program -- what will be produced, for whom and why.

- Objectives are better written if they use strong ACTION verbs.

EXAMPLE: CLIC will produce
Montreal Gay Rights Society will develop

WHAT TO DO IF YOU DON'T HAVE CLEARLY WRITTEN PROGRAM GOALS AND OBJECTIVES

1. Reconsider whether you want to do a goal based evaluation! A problem based evaluation may be more feasible and realistic.
2. Go to your program literature (funding proposals, records, other documents) to see if you can find clearly written goals and objectives.
3. Arrange a meeting of program staff, administrators, etc., WITH A FACILITATOR to try to come to a consensus on goals.
4. Use a more formal technique for determining goals (e.g. Nominal Group Approach or Delphi, see MODULE IV).
5. Keep your goals and objectives simple, clear and concise but word them in a way that means something to you.
6. Write them down!

17. HOW TO DEVELOP EVALUATION GOALS AND OBJECTIVES

Your evaluation goals and objectives will be closely linked to your program goals and objectives. If your program objectives are precise and measurable this will assist you in determining your evaluation objectives. The following are the steps you need to take in order to reach your evaluation goals.

STEP ONE Make sure your program goals and objectives are clearly specified and written down.

STEP TWO Focus only on the program goals and objectives you are interested in evaluating.

Consider how practical and realistic your program goals and objectives are in terms of evaluation. Your program goal may be to provide PLEI to all Native people in B.C. but you may

only have \$2,500 to spend on an evaluation or three weeks to do it. You won't be able to assess the effectiveness of the program in its entirety.

Assess the relative importance of your organization's goals. You may want to know how PLEI is used by the target group, but your funder may simply be interested in whether PLEI is reaching the target group. This difference may not be important UNLESS your funding is under review.

STEP
THREE Determine your evaluation goals and objectives. Once you have written your program goals it shouldn't be difficult to arrive at evaluation goals and objectives. The same rules for defining program goals and objectives apply. Goals are broad statements defining the general direction for the evaluation. Objectives break down the evaluation goals. It is up to you what aspect of the program goal you wish to evaluate or how you want to evaluate it. The decision will be based on your concerns, issues raised by administrators or funding requirements.

STEP
FOUR After your have determined the evaluation goals and objectives determine the measurement criterion you will use for each objective. There are many different ways of approaching this. You may want to look at issues like

- the number of clients served and not served
- the legal knowledge they have gained
- how they have put this knowledge to use
- whether they enjoyed the program
- how long the target group retained the knowledge

The following table illustrates one way program goals and objectives can be translated into evaluation goals and objectives. The methods you use will be determined by your budget, skills, and the time you have available.

TABLE 6: TRANSLATING PROGRAM GOALS AND OBJECTIVES INTO EVALUATION GOALS AND OBJECTIVES

Program Goal	Evaluation Goal	Program Objectives	Evaluation Objectives	Some Options to Measure Evaluation Objectives
The Ottawa Law Courts Information Program will educate elementary school children about the judicial process by exposing them to the court system.	Evaluation of the Ottawa Law Courts Program will assess whether it has been effective in helping elementary school children understand the judicial process.	To teach elementary school children who the major personnel in the court process are (e.g. judges, court clerk, crown counsel, defence counsel, etc.) through meetings with these personnel.	To assess whether the children recognize court personnel and understand their roles.	Check out the children's understanding of the roles. Can they identify roles and functions? Can they differentiate? How long do the children retain their knowledge? (questionnaires, pre and post testing, group discussions).
To teach children about different types of legal procedures (in criminal law and civil law) by a classroom presentation.	To assess whether children understand the basic characteristics of a criminal law or civil law proceedings.			Can children differentiate between types of law and proceedings? What are the different processes, roles, etc? (questionnaires, pre and post tests).
To expose children to one criminal trial.	To assess whether children understand the basic procedures of a criminal law trial.			Can children understand the trial process in terms of its major goals? Can the various actors be identified? What values do they display in discussing criminal proceedings? What is their own attitude towards the law? (pre and post tests, drama re-enactments, observation of discussions).

STEP Select your data gathering methods. These may include
FIVE questionnaires, interviews, observations, etc. See MODULE IV:
GATHERING THE DATA for a complete discussion of these methods.

18. HOW TO CARRY OUT THE PROBLEM ORIENTED APPROACH TO EVALUATION

It may not always be appropriate to base an evaluation on goals and objectives. Sometimes an organization has specific concerns or problems it needs to address. These may not be directly related to goals. You may also want to be more flexible and exploratory in the evaluation. Some examples of the types of problems or questions which could be addressed in a problem based evaluation are the following:

- How valuable is PLEI material to our target group(s)? How do they use it?
- Is the approach we use to disseminate information the best one? (e.g. brochures, booklets, audio-visual, classroom format).
- Our Board isn't working well with our coordinator and staff. What can we do about it?
- We've given the same legal workshop for five straight years. Is there something else we could do?
- We've had budget cuts and need to use volunteers more effectively. How can we do this?

Obviously not all of these questions could be examined in a single evaluation. It is necessary to focus the evaluation question further. The following steps will assist you to do this.

Step One

Identify the relevant decision makers, i.e. those with an interest in the evaluation (stakeholders). They will be the ones to help define the evaluation issues or concerns.

Step Two

Use the stakeholders to develop some very broad questions or concerns about the organization. Don't worry about how the questions are worded or how many there are initially. Two ways of doing this are:

- Do a brainstorming session in which a facilitator writes down all the issues. She/he combines and prioritizes them and feeds them back to the group.
- Ask each participant to write down three issues or problems. A facilitator can combine and prioritize them, then feed them back to the group.

Step Three

Have the stakeholders discuss each of the issues in depth. They might list a series of questions about each issue or problem either through a group discussion or by writing them down.

ISSUE: We've been giving the same workshop for five years. Should we consider something new?

SAMPLE 1. Does the workshop still provide valuable information?

QUESTIONS:

2. Who comes to this workshop? For what purpose?

3. How can we find out what other PLEI information might be useful?
4. Could we vary our method of presentation -- make it more interesting for our staff?

Step Four

Prioritize the evaluation questions by determining:

- The issues or problems which are having the most impact on the organization at the present time or will in the near future.
- What can be realistically evaluated considering your budget, motivation, skills and time frame. For example, you may want to know what the impact of PLEI classes has been on a specific target group, but do not have records of who the participants were. You may want to assess how well students retained their knowledge of court processes but do not have the time or skills to develop a pre-post test or questionnaires.

Step Five

Write down the evaluation purposes.

The purpose of this evaluation is (a) to assess the value of the Seniors Law Forum target group and (b) determine whether other PLEI information would be of more value.

Step Six

Determine measurement criteria and data analysis methods. From this point the evaluation will proceed in similar ways to the goal based evaluation. Some ways of examining the issue in Step Five would be to:

- Look at the numbers attending the program. Are they repeaters?
- Look at the degree to which they enjoy the presentation and how they use the information. Why do they attend? (e.g. for a social evening? to acquire legal information?)
- Do a needs survey of the target group to determine their overall PLEI needs.

A review of program attendance statistics, the use of client questionnaires, or a telephone survey would be ways of gathering these data.

Michael Patton (1978:83-84) suggests that the evaluation questions for a problem based evaluation should be characterized by the following:

- (1) It is possible to bring data to bear on the evaluation questions, i.e. you can analyze them.
- (2) There is more than one possible answer to the question.
- (3) The decision makers want and need information to help them answer the questions.
- (4) The decision makers want the answers for themselves, not just for someone else.
- (5) The decision makers care about the answers to the question.
- (6) The decision makers can indicate how they would use the answer to the question -- in other words, they have considered future action.

MODULE II

USING AN EVALUATION CONSULTANT

MODULE II
USING AN EVALUATION CONSULTANT
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1. HIRING AN EVALUATION CONSULTANT

There are many types of evaluations which can be done internally by a staff member such as needs assessments, evaluating specific problems and assessing client satisfaction levels. However a more comprehensive needs assessment or program evaluation may require the services of an outside evaluation consultant. While consultants may be more expensive and may not be as knowledgeable about the program she/he may have more time, expertise and objectivity (see MODULE I, Section 9 for a more detailed discussion of the disadvantages and advantages of doing the work internally or externally.)

The type of evaluator to hire depends on the formality, sophistication, length and budget of the evaluation. The funder for the evaluation (if, for example, it is government) may have a hiring process which must be followed. A usual procedure is to:

1. Define evaluation goals and expectations and clarify budget and resources
2. Define the role and skills needed by the evaluator
3. Gather names of possible evaluators (3-5)
4. Ask potential evaluators to submit a proposal outlining his/her approach to the project, budget, etc. (You must supply the framework or available material on which to base the proposal.)
5. Review the proposals
6. Interview the evaluation candidates
7. Negotiate the contract and the evaluator's role
8. Sign contract

2. WHERE TO LOOK FOR AN EVALUATOR

The best way to choose an outside evaluation consultant is for a representative group within your organization to oversee the process (made up of staff, administrators and board). But this may not always be possible. In some cases the board or co-ordinator of the organization may hire the consultant without staff input, or the government funder may choose the evaluator.

We were told that our program had to have an evaluation and so they sent the evaluator from back east to see us. I met him, we talked for two hours and I didn't understand a word he said. He never consulted me or our staff and, frankly, few of us have ever bothered to read the report.

To find an appropriate evaluator:

- Check with others working in PLEI organizations in your region or province to find out who has done evaluative work in your field.
- Get suggestions from others involved in social programs (e.g. United Way, community corrections organizations, community groups such as women's or native groups).
- Ask government departments (e.g. Attorney General, Secretary of State, Health and Welfare, Department of Justice) whether they have names of evaluation consultants who have legal or social program experience.
- Approach University faculties or community college departments. For example, social work, criminology, sociology, education, public administration, law, and business administration departments may be aware of such evaluators.

- The Canadian Evaluation Society (CES), also keeps a roster of evaluators, listing their areas of interest and expertise.

3. WHAT TO LOOK FOR IN AN EVALUATOR

The evaluation process can be a painful and disruptive one. A positive outcome depends to a large degree on whether you have selected the right evaluator for the job. The following are some critical factors to keep in mind.

- Does the evaluator have some familiarity with the PLEI field and your organization's goals and activities? If not, does the evaluator have enough comparable experience to be able to understand concepts and problems quickly? This should be described in the consultant's resume. If in doubt, check some references, ask to see some of the consultant's previous work.
- Does the evaluator have the required skills to carry out the evaluation effectively? If communication skills or a sensitivity to a specific client group are required, does the evaluator have them?

Most of our clients are poor and have a minimal level of English. We have had to word our questionnaires very carefully just so they will be understood.

- If complicated data analysis is necessary, does the evaluator have this skill and experience? If not, can the evaluator subcontract to other evaluators?
- Is the evaluator receptive to your organization's needs? Is the evaluator willing to negotiate a role with you or work in a reciprocal way?

- Is the evaluator a good communicator? Does s/he talk too much and not listen enough? Can you understand what the evaluator is saying?
- If you have approached a company to do the evaluation, do you know who will be doing the actual evaluation with you? Sometimes large research firms will send high profile staff to bid on contracts but will assign junior staff (whom you may not have met) to do the work.

4. ASSESSING THE EVALUATION PROPOSAL

In order to carry out the evaluation you will ask the evaluator to submit a proposal outlining evaluation goals, budget, methodology and time line. Even if the evaluation is done internally by staff, some of these items should be clarified before the evaluation begins.

THE EVALUATION PROPOSAL SHOULD CONTAIN:

1. A detailed description of the work to be done, the methods to be used in the study, and the results which are to be expected.
2. Names of the people who will be used in the study with a summary of their backgrounds.
3. A time schedule outlining various stages of the evaluation. (At a later date factors beyond the evaluator's control -- perhaps even arising from decisions of the PLEI group or funder -- may require changes in the time schedule. Nevertheless, you do need to know initially when you can expect the evaluation or certain stages to be completed.)
4. Some basic material describing the consulting firm (if applicable, its previous work and clients).
5. A description of the type of relationship expected between the consultant and your organization (the client).
6. Any resources which the consultant expects to be supplied by the client (e.g., typing, mailing, printing).
7. Financial matters -- fees to be charged, payment schedules and expenses required.

5. NEGOTIATING THE EVALUATION CONTRACT

Once an evaluator has been chosen to do the evaluation, the evaluation contract must be negotiated. In some cases, many of the thorny evaluation issues may already have been resolved during the hiring process. But even these items should be reviewed and clarified.

Negotiating the contract is one of the most crucial steps in the evaluation. Planning and clarifying the major evaluation issues serves as a protection for both you and the consultant. It strengthens the communication process which will be so important during the rest of the evaluation. During contract negotiations both the organization and the evaluator may discover issues which are likely to cause problems later.

In our case the evaluator wanted to do follow-up on legal information given to women about battering, separation and divorce. He wanted to do a telephone survey but we felt this might endanger some of the women. So we had to work out another method.

The following are the major issues which the evaluator and organization need to examine before the evaluation begins.

5.1 Clarify the political context of the evaluation

Political issues, most of which are usually not written into the evaluation contract, include the following:

- Who funds the agency?
- Who will be funding the evaluation?
- Who has called for the evaluation?
- Are there any constraints on the research?
- What local, regional or national political pressures might affect the program and evaluation?

- Is there a "hidden agenda" for the evaluation?
- Are certain results expected or "required" by staff or others?
- Does continued funding rest on the outcome of the evaluation?

5.2 Clarify the operational context

By operational context we mean issues such as the following:

- What is the basic structure of the organization?
- What is the "chain of command"?
- What is its basic philosophy and history?
- Who are the main client groups?

5.3 Determine the main program goals and objectives.

Program goals are broad and general statements of purpose and direction. Program objectives are concrete and measurable. They define how the program goal will be reached. (See MODULE I)

5.4 Establish the evaluation goals and objectives

The evaluation goals and objectives should be closely linked to the program goals and objectives. The evaluation objectives should consider what information will be collected and why. An evaluation usually deals with only some of the program goals.

PROGRAM GOAL

To improve the quality of life of new Canadian immigrants and increase their participation in Canadian life by providing basic legal information.

EVALUATION GOAL

To assess the impact and effectiveness of legal information provided to new Canadians.

See MODULE I - Planning Your Evaluation

5.5 Select the methods or strategies to do the evaluation

During the contract evaluation process the evaluation should specify what methods will be used to collect evaluation data. Some of the most common are:

- an analysis of program documents and records
- personal interviews (structured -- unstructured)
- questionnaires
- telephone surveys
- observation
- case studies
- testing (pre and post, etc.)

It is usual for most evaluators to employ a range of evaluation methods, especially if the evaluation is to be a comprehensive one.

SEE MODULE IV for information on data-gathering techniques
--

5.6 Identify the sources of information available to the researcher

There are three sources of information available to an evaluator: documents, people, and occasions. **Documents** include program records, previous evaluations or research, program logs, minutes of meetings, publications and annual reports. **People** include staff, funders, clients, board administrators or community agency staff. **Occasions** include public forums, classes, workshop, board or staff meetings. Here, again, the evaluator should clarify which sources will be utilized during the evaluation. Certain sources may be problematic (e.g. a board meeting may be confidential, a PLEI instructor may not feel comfortable having an evaluator watching his presentation). In some cases the evaluator may need the assistance of the PLEI organization's administrator in order to acquire the information.

5.7 Discuss the possible impact of the evaluation on the organization

Evaluation is almost always disruptive and threatening to the organization and staff being evaluated. The results of the evaluation may have a long term impact on staff, structure and purpose. It is useful at this stage for the evaluator and organization to discuss issues which might arise during and after the evaluation.

- How prepared are staff to assist the evaluator?
- Do they feel comfortable with the evaluation process?
- What if some evaluation findings are highly critical? How will this be seen in the organization? Will it affect funding?

To handle some of these stresses, some strategies might be adopted during the course of the evaluation.

- The evaluator and administrator could meet with the staff or board early in the process to discuss the evaluation purpose and methods.
- The evaluator could be available to answer staff questions at specific times during the process.
- Official "reporting back" mechanisms could be arranged (e.g. interim reports, oral progress reports).
- A draft final report could be arranged if time permits.
- The organization could ask for a forum to respond to the evaluation.

Sometimes organizations make too many demands on the evaluator to attend meetings and produce interim or draft reports. The evaluator has a limited time frame in which to do a number of tasks, so expectations should be clear and realistic.

5.8 Specify resources needed to carry out the evaluation

The evaluator will probably need resources and services to carry out the evaluation. These may be procured by the evaluator under the budget or may be supplied by the organization:

- office space
- secretarial or typing assistance (word processing if applicable)
- photocopying
- computer assistance
- research assistance
- purchase of other materials (books, resources, etc.)
- travel expenses (may include car mileage rates if extensive travelling is required for interviews, accommodation, per diem rates on food, air or other travel).

You should determine who will cover these expenses and how, BEFORE the evaluation is undertaken. It is customary for expenses to be paid to the consultant at several time periods during the contract, although this depends on the length of the contract. A pre-payment, mid-payment and post-payment is common.

5.9 Establish evaluator fees

There should be a clear account of the fees to be paid to the consultant and the schedule for paying the fees. Again, when the fees are paid is a matter for negotiation.

Example:

Fees	25 days @ \$250 per diem	\$6250.00
Advance payment (by Sept. 1)		\$2000.00
Midpayment (by Oct. 10)		\$2000.00
With 10 days of final report (Nov. 10)		\$2250.00

5.10 Establish time frame

The contract should contain a time frame for the evaluation and a clear date of its completion. It is customary for consultants to specify the number of days required for each task.

Example

September	October	November	December
1			
	2		
		3	
		4	5
			6
			7

1. Train interviewers (3-1/2 days).
Develop final questionnaires (3 days).
2. Distribute questionnaires to all law forums (2 days).
3. Analyze data from questionnaires (3 days).
4. Develop interview schedules for judges, interview judges (3 days).
5. Analyze all data (2 days).
6. Write final report (4 days).
7. Meet with staff and board (1/2 day).

5.11 Discuss utilization of evaluation results

While it is not customary for the PLEI organization and the consultant to agree upon ways in which the report is to be distributed and utilized, this is a critical issue. Most evaluations are read by only a few people in the organization and are put to an early death on a dusty shelf. One PLEI group with a large clientele agreed to publish the most important evaluation findings in a "news release". Another group made copies of the executive summary and distributed them to all the board members. Still another arranged a staff meeting to which the consultant was invited to orally present the report and answer questions. This time should be built into the consultant's budget.

5.12 Ethical considerations in the evaluation

Ethical issues in the evaluation may not always be foreseen, but they are likely to surface at some point. Some issues to consider and to agree upon if possible are:

● Do individuals participate in the evaluation voluntarily? This is a thorny issue because although ideally most evaluation participants will be asked whether they consent to an interview or to answering a questionnaire, in some cases it will be necessary to gather data without the client's consent (for example, when records are used). In this case the CONFIDENTIALITY of the information must be maintained by the evaluator. Usually, the evaluator will ensure that evaluation comments are made anonymously, or that answers are numerically coded, so that they cannot be readily identified. (This may be necessary in a mail survey where evaluators have to know who has or has not replied to a questionnaire.)

The basic overall ethical rule is that evaluation, like any research, should not do harm to the people being studied. PLEI may seem to be a field of research where there is little likelihood of harm (compared, for example, to medical research), but there are situations to be wary of. Clients receiving legal information may be from groups which feel uncomfortable about their own status: welfare recipients may not want to divulge their financial status; immigrant groups may feel vulnerable about citizenship status; young people may be concerned that information may be used against them.

● Are identities of evaluation researchers revealed? The issue should be carefully considered because the results can be problematic. In one PLEI evaluation study, researchers were assessing the validity and quality of the legal information which was being given by field staff:

We were told by the evaluators that researchers would come posing as clients to get legal information. Even though I agreed to it I felt ripped off. I always give a lot to my clients, but the evaluation meant there would be some fake "clients" who would simply be manipulating me. I didn't like it!

● What types of questions should not be included? While the maxim "Thou shalt do not harm" should guide evaluation research, it is important to find a balance between getting good, comprehensive data and safeguarding the rights of recipients. One PLEI group convinced the evaluator not to include specific questions on socio-economic status on questionnaires because they thought this was too private to share. This lack of data affected the over-all value of the evaluation data.

6. A SAMPLE CONTRACT

Although standardized contracts do exist, it is better to create your own evaluation contract in negotiation with the consultant. Contracts may vary in length and complexity. It is important to make it as specific as possible without making it too complex. Don't use jargon! If the evaluator has been contracted for only a few days to work on a very specific issue, then a simple "letter of agreement" defining the goals, process and fees of the project may be sufficient. The contract on pp. 46-47 is a hypothetical sample of a more comprehensive contract which has been designed by the evaluator and group involved. Even if a member of the staff has agreed to do the evaluation it is a good idea to have the purpose, methods and other issues clarified in writing.

7. OWNERSHIP OF THE EVALUATION

It is customary for the hiring organization to "own" the consultant's report after it has been produced. However, the CONTENT of the evaluation report cannot be changed without the permission of the consultant. This should be clarified prior to the evaluation. It is also customary for the organization to provide a small number of copies of the report to the consultant.

8. OBLIGATIONS OF THE EVALUATOR

The evaluator -- whether external or internal -- has two sets of obligations to fulfill: one to a set of research principles and the other to you, the organization.

The evaluator is paid ... to conduct valid evaluation appropriate to the circumstances, to provide objective, impartial reporting and to offer creative, scientifically sound criticism designed to improve that program's services and to guide the long range planning of related social programs.

(J. Sieber, 1981:174)

The evaluator is obliged to live up to the contract s/he has arranged with you -- to study the issues, to finish the work on time and for the agreed price.

We believe that an evaluator should be sensitive to the group's past evaluation history and to the threatment that evaluation often entails. Whatever the effectiveness or impact of the PLEI program, people have developed, it, expended energy on it, and given commitment to do it. This should be acknowledged and respected.

EXAMPLE 1: SAMPLE CONTRACT (HYPOTHETICAL)

LEGAL NEEDS ASSESSMENT:
MANITOBA LEGAL INFORMATION CENTRE

Contract between:

Jillian Rightway,
Research Consultant

and

Manitoba Legal Rights
Information Centre (MLRIC)

1. Program Background

The Manitoba Legal Rights Information Centre has operated since 1978 to provide legal information to people in Manitoba through publications, legal forums, workshops and the media. Since 1982 it has become more focussed in its approach -- targetting specific groups with specific legal education needs such as women and native people. This year an extensive needs survey will be carried out in order to ascertain the legal needs of seniors and physically disabled people.

2. Research Purpose and Goal

The goal of this needs survey is to assess the needs for legal information and education of disabled people and seniors in the province. The results of this survey will be used to plan the focus of the material and the best method of presentation.

3. Evaluation Methods

The needs survey will be conducted using three methods:

- (a) A mail survey will be sent to representatives of all seniors and disabled groups throughout the province asking for their opinion on their group's needs for legal information and education. The survey will look at legal information needs already being met, future needs, appropriate delivery methods, and cost of delivery.
- (b) Interviews with representatives of local and governmental agencies which work with the physically disabled and seniors (e.g. The Ministry of People, Provincial Ombudsman, Provincial Special Needs Counsellors).
- (c) A review of legal material already targetted to these groups. Groups in (a) and (b) will be asked to provide us with a sample of materials. In addition, other public legal information and education organizations (e.g. public TV-access program) will be asked if they have produced any legal information materials of interest to these groups.

4. Tasks of the consultant and MLRIC

The consultant will complete the following tasks:

- | | | |
|-----------|-----|--|
| (10 days) | (a) | Development, distribution, tabulation of the mail survey. |
| (3 days) | (b) | Development of interview schedule for group representatives. Training of interviewers. |
| (3 days) | (c) | Overview of existing PLEI literature related to the physically disabled and senior citizens. |
| (5 days) | (d) | Writing up of the needs survey into a final report. |

MLRIC will complete the following tasks:

- (a) The development of an inventory of groups working with the disabled and seniors to be used as a basis for the survey.
- (b) The interviewing of agency and governmental representatives.
- (c) The distribution of the final report.

MLRIC will meet typing, mailing, copying needs within its offices.

5. Time Line

The expected completion date of the needs survey will be March 15, 1986. Completion dates for the components are as follows:

By Feb. 1	- Inventory developed
By Feb. 5	- Mail survey developed and distributed.
By Feb. 20	- Interview schedule developed, interviewers trained.
By March 1	- Interviews completed.
By March 7	- Results from mail survey tabulated.
March 15	- Final report.

6. Budget

Consultants Fees

21 days @ \$200/day \$4,200.00

To be paid according to the following schedule:

February 1: prepayment \$1,000.00

March 1: \$2,000.00

By March 25 (after submission of final report) \$1,200.00

TOTAL \$4,200.00

Expenses

Travel: 900 kilometers @ 10¢/kilometer \$ 90.00

Telephone \$ 150.00

TOTAL \$ 240.00

MLRIC will absorb all other costs.

TOTAL CONTRACT BUDGET \$4,440.00

7. Consultation between MLRIC and Consultant

MLRIC will be consulted in regard to the questionnaire and interview contents before they are applied. In addition, the consultant will review the results of the needs survey prior to the publication of the final report with the director and liaison staff (evaluation sub-committee).

8. Report Utilization

MLRIC has agreed to publish the most important aspects of the needs survey in its monthly newsletter. In addition, a feedback sheet will be sent to all individuals and groups who have participated in the survey.

We believe evaluators should consult actively with the group they are evaluating, and with clients who receive information or services from the group. As much opinion as possible should be sampled -- the evaluator must avoid making alliances within the organization or listening only to staff at certain levels of the organization.

When we were evaluated the consultant interviewed me [the executive director], the board members and several senior staff. But there is a volunteer here who has been involved for over ten years. She probably knows more about our organization than anybody....

9. OBLIGATIONS OF THE PLEI GROUP

Your organization also has an obligation to live up to the terms of the verbal agreement or contract. This means providing assistance and resources where they have been promised, paying fees and expenses according to schedule and respecting the time schedule. Sometimes groups are insensitive to the position of evaluators who consult for a living.

We were approached by a group to do a needs assessment and were assured that the money was available and that we could go ahead right away. So we developed the proposal and subsequently found out they hadn't even approached funders for the money.

The contract was written so that the final payment to me would be due ten days after the report was submitted. Two months later I found the invoice had still not been submitted.

Evaluation is not only threatening to a group but highly stressful to the evaluator (and the stress may be even greater for a staff member doing the evaluation). Groups often expect evaluators to define unique and creative approaches, expose hitherto unknown facts or even make such an airtight case for the value of the organization that continued funding will be guaranteed. However, even at its best, evaluation may be a fairly methodical gathering of facts and opinions or a reworking and re-assessment of information that many in the organization already know. When the expectations of the group (and evaluator) are unrealistic ("this evaluation will CONVINCE the provincial government to refund our program") then bad feelings between the evaluator and the group can result.

Because evaluators must try to maintain objectivity, they often become isolated. It is important for the group and evaluator to develop ways of communicating and consulting with each other on a regular basis. It is also crucial to provide feedback to the evaluator on how s/he has conducted the evaluation, the worth of the data to your group and the readability of the final report.

10. CONFLICTS BETWEEN EVALUATORS AND THE GROUP

Evaluators and program staff work from different orientations. These differences in focus often create clashes and misunderstanding during the evaluation process.

Although evaluation researchers and practitioners are linked through a common interest in more effective social programming, their relationships ... are often anything but harmonious.

The conduct of evaluative research, in fact, is often dominated by abrasive encounters between researcher and practitioners. (Caro, 1975:55)

Such conflicts may appear to be trivial but they can jeopardize the evaluation process and results to such a degree that large amounts of time, money and energy are wasted. Typical conflicts surface this way:

<u>EVALUATORS COMPLAIN OF:</u>	<u>WHILE STAFF FEEL:</u>
INADEQUATE RECORDKEEPING BY THE GROUP.	RESENTFUL OF ALL THE PAPERWORK DEMANDS MADE ON THEM WHILE THEY ARE TRYING TO SERVE CLIENTS OR IMPLEMENT A PROGRAM.
THE PROGRAM TAKING A NEW DIRECTION OR ESTABLISHING NEW GOALS AFTER AN EVALUATION PLAN HAS BEEN DEVELOPED.	IT IS THEIR RESPONSIBILITY TO SHAPE THE PROGRAM ACCORDING TO THE NEEDS OF THEIR TARGET GROUP.
REPORTS NOT BEING READ, RECOMMENDATIONS NOT BEING TAKEN SERIOUSLY.	ANGRY THEY HAVE TO WAIT SO LONG FOR RESULTS, FRUSTRATED BECAUSE THE EVALUATION REPORT MAY BE TOO LONG, TOO TECHNICAL.

An understanding of the inevitable differences between the evaluator and staff may help avoid clashes. Evaluators chosen internally may have difficulty crossing over roles and other staff may exert pressure on the evaluator to remain "one of us".

Of course, not all evaluators are conservative and results-oriented. Nor are all staff charismatic and action-oriented. We believe that WHEREVER POSSIBLE evaluators should be responsive to process as well as results. However, the fact remains that evaluation is a highly threatening activity which may have a disruptive impact on the group.

TABLE 1: EVALUATOR AND STAFF ORIENTATIONS

THE EVALUATORS'S ORIENTATION	THE STAFF'S ORIENTATION
The evaluator must focus on certain aspects of the program and eliminate others. The evaluator values the concrete (goals, programs, statistics). The evaluator likes to "measure" things or at the very least to understand the framework in which things happen. To the evaluator results are important, sometimes more important than process. Evaluators keep irregular hours. Their activities might not always be obvious. Evaluators tend to be a bit more conservative -- to develop a plan and then want to implement it.	The Staff may consider the evaluation plan seriously limiting. The staff values action. They may not have formulated their goals into concrete statements. The staff may function by "experience", intuition or even charisma. This stance may be threatening to staff who believe in the worth of the program in a strongly personal way. The staff may also be somewhat over optimistic about the ultimate value of the program. Staff tasks are usually quite defined. They may not understand the work of the evaluator. Staff may be more innovative and resent being straightjacketed.

11. RESOLVING CONFLICTS BETWEEN THE EVALUATOR AND STAFF

Are there any ways of resolving the conflicts inherent in the roles of evaluator and program staff? While it is not possible (nor even desirable) to do away with all role differences, the following suggestions may help to minimize conflict.

- The program staff should choose an evaluator who is communicative and willing to listen to their view of what is important. Some evaluators are more responsive in terms of style and method.
- Recognize that role differences are not fully resolvable but can be tolerated if there is mutual respect.
- Tensions related to role differences are not always negative. Evaluators need to be reminded that programs cannot always be categorized into neat components; program staff need to be reminded that standing back and looking at their work in an objective way may provide new insights.
- Be more realistic about program AND evaluation goals. Conflict stems from exaggerated or unrealistic program goals.

Sponsors, the general public, and clients frequently have unrealistic expectations about what can be accomplished with a limited budget, in a limited period of time Just as services are overburdened with extravagant objectives, expectations for evaluation are often excessively ambitious. (Caro, 1975, p. 60).

- If staff can feel less pressure to produce miraculous solutions then they might feel more amenable to looking at evaluation results which may be somewhat critical. Critical results will not mean failure but progress on a more modest (but more realistic) path.
- Define the importance of evaluative research to the program. Conflict and resentment can arise when staff feel their own work is not sufficiently recognized but that money is being spent on evaluation. Yet there may be times when money has to be redirected to evaluative research (for example, if evaluation is mandated, or if funding requires it). At other times, placing a strong focus on evaluation can be a mistake.

We need to do an evaluation of some kind because attendance at some of our law forums has dropped right off. But how can we rationalize spending the money when we are laying off staff and using more and more volunteers?

- It may be possible to design more modest, less expensive review methods such as using limited sampling, testing a new method of program delivery on a pilot project basis, or analyzing service records instead of organizing interviews or developing questionnaires.
- COMMUNICATE! The evaluator should spend time with staff explaining evaluation methods, their purpose and importance. How can this information be used by staff? What will it explain about the impact of legal information? Why are interviews being used in this instance, questionnaires in another? At the same time the staff can explain the problems they have in accommodating the research, and their own feelings of vulnerability.
- When all is said and done, tensions will ease if the staff feel the evaluation is relevant and deals with issues they are concerned with. This will be more likely if the evaluator is responsive to the program staff, understands the PLEI field and if the terms of the evaluation have been carefully worked out between the staff and evaluator beforehand.

12. WHAT TO DO IF YOU HAVE NO POWER TO AFFECT THE EVALUATION

All the above comments are based on the probability that you WILL have some power to design or coordinate the evaluation. However, in some cases this will not be so.

In our case we had a lot of good evaluation ideas and were willing to accommodate others. But our Board decided to hire someone without consulting us. This person did not even consider our thoughts on research and we have yet to see the report that was done.

Unfortunately, this is not an uncommon experience for PLEI groups. For program directors and staff it is a painful, alienating experience and may produce long-standing bitterness towards any type of evaluation in the future. As one PLEI staff member said, "Often groups feel that evaluation is done TO you rather than FOR or WITH you." As much as we deplore these

types of evaluations, it seems likely that they will continue to take place, particularly since more and more evaluations are likely to be legislatively mandated. What can you do to empower yourself in the face of this kind of evaluation? Here are some ideas that other PLEI groups have tried.

TABLE 2: EMPOWERING YOURSELF IN THE FACE OF AN EVALUATION ATTACK

1. BE ORGANIZED--know what you and your staff want and need in terms of evaluation. Be frank about problem areas. Write them down. Present an organized document on evaluation needs to your board, funder, director and the evaluator.
2. BORROW OR HIRE A BROKER--find a PLEI expert or a reputable evaluator who will discuss the terms of the evaluation with your funder or board and support your position. Even if the attempt fails you will have support from another "expert."
3. STRESS THE POOR UTILIZATION RATE OF EVALUATIONS WHEN PROGRAM STAFF AREN'T INVOLVED--it is a known fact that unless the program staff are informed and involved in evaluation planning to SOME DEGREE the final results will likely be ignored.
4. TAKE THE OFFENSIVE--the language of evaluation may be intimidating and highly technical. Don't be overwhelmed. You know the organization better than the evaluator and have a right to speak for it.
5. BE READY TO SUGGEST YOUR OWN EVALUATOR, one with credentials in the PLEI and evaluation field.
6. IF ALL ELSE FAILS, RESPECT YOUR FEELINGS--if you can't negotiate then respect your own bad, sad and angry feelings. Sound off to friends and family. Try to figure out a strategy for survival. Can you win some concessions from the evaluator by being low key? Is it best to "play the game"? Or should you officially state that your organization has lost confidence in the evaluation process (e.g. through letter to your funder, or in extreme cases, through a media release), and agree to provide only the minimum allowable degree of cooperation with the evaluator? We see such a decision as a last resort which may be counterproductive, but which may salvage some self-respect for you and your staff.

MODULE III

TYPES OF EVALUATION YOU CAN DO

MODULE III

TYPES OF EVALUATION YOU CAN DO

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 - 3.8.6 Assessing the appropriateness of using cost effectiveness
analysis
 - 3.8.7 The treatment of time in assessing costs and benefits



1.0 NEEDS ASSESSMENT AND PROGRAM EVALUATION: AN OVERVIEW

The terms describing evaluation approaches and models are confusing and sometimes overwhelming. Even the same approaches can be given more than one name. The terms we use here to describe program evaluations are ones which we feel are most appropriate to PLEI.

Needs Assessment: is research done to determine what your clients or target groups want or need in the way of legal education information or resources. You will likely do a needs assessment at the beginning of a program or when a program's goals are being re-examined so that you can set useful and realistic program goals.

EXAMPLE A PLEI program in Alberta canvassed public libraries in the province to find out what legal information is being requested the most. They will gear their publications program to meet the needs of these groups.

Program Evaluation: describes any type of assessment of a program's functioning or worth. In this Resource book we look at program evaluation in the following ways.

Utilization of Services - who uses the program?

Organizational Assessment - how is the program functioning and how can it be improved? (This is sometimes called performance evaluation).

Materials Assessment - what is the distribution, worth and use of materials produced by PLEI programs?

Impact Assessment - what is the impact of PLEI programs on the individual and community?

Cost-Effectiveness Assessment - what is the cost of PLEI programs compared with the benefit?

2.0 NEEDS ASSESSMENT

Needs assessment is the determination of what your clients or target group want or need in the way of legal information, education or resources. Needs assessment is an essential first step in the planning of a PLEI program but it is often not done systematically. Sometimes groups get carried away by what may appear to be clear PLEI needs without assessing the scope or importance of these needs. At other times political factors (for example, new legislation or government pressure) may lead a group to develop a program based on a need which is not necessarily valid. PLEI groups may also ignore or overlook real needs in favour of "popular" ones, ones perhaps that the mass media have stressed.

There are two stages in needs assessment although for practical purposes most groups look at both at the same time. NEEDS IDENTIFICATION involves the identification of the legal needs of groups or individuals, while NEEDS ASSESSMENT involves the prioritizing of these needs.

2.1 Purposes of needs assessment

Needs assessment enables a group to systematically and rationally develop program goals and objectives and to undertake the building of a new program. Needs assessments also provide groups with a sense of accountability. This type of accountability is often very important to funding agencies. NEEDS ASSESSMENT is not always done at the beginning stages of a program. It might also be used DURING a program when new goals are being devised, new needs are surfacing or priorities are being reassessed.

2.2 Problems associated with needs assessment

Needs assessment can be extremely time-consuming, expensive, and frustrating to PLEI staff who may feel they already know what the legal needs are and want to "get on with the job." Many groups do large,

unfocussed needs assessments without determining beforehand what their target groups are or the particular needs they want to look at.

We surveyed needs in about thirty communities in a remote area of British Columbia. It took us a good part of a year. Then we had so much data we didn't really know what to do with it.

In order to avoid such problems, it is important to try to focus the needs assessment as much as possible rather than attempting a large scale effort (unless you have access to unlimited funding and staffing).

DON'T do needs assessment unless you plan to follow through and utilize the data you acquire. If you are already convinced you know what the legal education needs of your target population are, or if you have already established your program, then it is unfair to ask for input you have little intention of using. Needs assessments almost always raise public expectations for services and programs and these expectations must be considered by your group.

Needs assessment is an important part of planning, but it does not provide magical solutions to program development. Although the needs assessment will give you information about PLEI needs, you will still have to translate these needs into program priorities. Needs also change constantly because of the socio-economic climate, political pressures or legislative changes. When old needs are "met", new ones surface.

2.3 Steps in doing a needs assessment

Although there is no set formula for doing a needs assessment, the following steps are usually taken.

- Identify the purpose of the needs assessment. the receivers of the research results.
- Review the staff and time resources required for a needs assessment. Consider whether an outside researcher or consultant will be necessary.
- Define the level at which the needs assessment will take place (individual or group).
- Define the needs issues you wish to address (e.g. awareness, accessibility, skills, resources).
- Develop needs assessment methods (e.g. surveys, forums, etc.).
- Administer research (pretest methods if feasible).
- Analyze and summarize results
- Present results to program staff, board, etc. Present summary of information to group surveyed (if feasible).

2.4 Basic issues to address in a needs assessment

There are a number of issues to address in a needs assessment. These are:

A. The level at which you will conduct the needs assessment (individual or group)

Most PLEI groups assess legal information and education needs at the level of the individual. While this is a valid approach, it ignores the group as another target level of PLEI. Many PLEI needs are experienced at a group level and can be met better there than at the individual level.

Some groups, for example, are recognized in law and are treated as a legal entity. One illustration is the explicit recognition of Indians in Canada as a legally recognized group that is treated in some areas as qualitatively different from others in society. When members of this group are confronted with problems that are related to those regulations, statutes and laws which define them as a separate entity, to deal with these problems only at the individual level would have the effect of ignoring the collective nature of the problem. That is, if new legislation is being proposed to restrict the hunting and fishing rights of Indians, most would view the act of one individual attempting to challenge the new legislation as inadequate. (Brickey and Bracken, 1982:16).

B. The characteristics of the population whose needs you are assessing.

You might want to look at such characteristics as the size of the group, commonalities, demographic data and geographic location of the group.

C. The basic need issues you want to address.

Examples of issues are:

- The needs of groups and individuals to increase AWARENESS of PLEI (basic information needs).
- PLEI SKILLS needed or wanted by groups or individuals.
- PLEI RESOURCES available to groups and individuals.
- the ACCESSIBILITY of these resources to groups and individuals.

Many groups look at needs in a generalized way without attempting to focus on the type of need. A PLEI needs assessment of disabled individuals could look at any or all of the following issues:

- How AWARE are disabled individuals that some of their problems are legal?
- How AWARE are disabled individuals of laws and regulations affecting their lives?
- How SKILLED are disabled individuals at utilizing relevant legal resources?

- What ACCESS do disabled individuals have to existing legal information?
- What PLEI RESOURCES are available to disabled individuals?

Deciding on the Level and Type of needs you want to address will enable you to focus your needs assessment more precisely. Brickey and Bracken (1982) have expanded the levels of needs assessment to include not only individuals and groups but also aggregates and public citizens. A description of these levels and approaches follows in Table 1. DO NOT follow this model too literally. Instead, review it with the idea of narrowing your needs assessment and becoming more precise.

TABLE 1: AN APPROACH TO PLEI NEEDS ASSESSMENT

Level at which Needs Assessment Takes Place	Definition of PLEI Needs of this Level?	Types of Needs To Be Addressed			Appropriate Methods	Other Needs Assessment Data to Collect
		Awareness Needs	Skills Needs	Resources Needs (Includes accessibility to resources)		
1. Individual	What are the legal issues which affect the population at level of the individual? eg. divorce, buying or selling a house, consumer issues?	1) Does the individual RECOGNIZE his problems as legal problems? 2) How AWARE is the individual of ways to resolve the problem? 3) Is the individual aware of legal resources which may help him solve his problems? e.g. phone-ins, libraries? [These types of questions are usually addressed directly to the individual]	1) What SKILLS does the individual need in order to use available resources (eg. using library, finding a lawyer)? 2) What SKILLS does the individual need in order to be more legally assertive, eg. how to complain effectively, gather evidence? [These types of questions are usually addressed directly to the individual]	1) What resources exist at the individual level to fulfil these needs, eg. schools, Ombudsman, mass media etc.? 2) How accessible are these resources to the individual? [These questions are usually researched by the group doing the needs assessment]	Individual mail surveys Phone surveys Community forums Key informants Inventory of Resources Document Analysis (Particularly applicable to resources needs)	-Size of target population -Common characteristics of populations. -Can individuals be distinguished from non-target group (e.g. sex, age, other demographic characteristics) -Where target population located
2. Groups (Individuals or groups who share a common social identity and see themselves as possessing a different culture from others (eg. prisoners, gays, trade unions, farmers, religious groups))	What are the legal issues that affect the group (e.g. human rights, labor legislation)?	1) Does the group see its problems as LEGAL problems? 2) How aware is group of laws/legislation which dictate decisions affecting them? 3) How aware is group of legal services dealing with group issues?	1) Does the group have enough SKILLS to organize itself when dealing with legal issues? (Groups have certain advantages which can make them a powerful force in handling legal matters) e.g.: - is the group able to approach problems in an organized collective way? - is the group able to lobby effectively? - is the group open to forming coalitions with other groups?	1) What resources exist to provide information on the legal implications of certain problems? 2) What structures within the group are feasible to produce collective "consciousness raising"? 3) What resources might help groups increase their legal consciousness or lobby more effectively? 4) How accessible are these resources?	Interviews with group reps. Individual surveys (phone, mail, face to face) which explore GROUP issues Resource inventory Analysis of group Delphi	-Size of group -Degree of group organization -Group history -Description of group's main characteristics -Economic resources of group
3. Aggregate (A collection of individuals who don't necessarily share a common social identity but who do share a common PROBLEM eg. homeowners Against Unlawful Eviction, women's groups, children, immigrants)	What are the legal issues which affect the resolution of this problem by the group?	1) Do the group's individuals recognize they share this problem in common with others? 2) Do the group's individuals feel there is some value in treating the problem as a collective one?	1) See skills needed under INDIVIDUALS 2) See skills needed under GROUP	1) What resources exist to provide information about specific legal issues, eg. class action legislation, watchdog groups, legal aid, media support	Interviews with group reps. Analysis of group documents Individual surveys Resource inventories Delphi	-Size of aggregate -Economic resources of aggregate -History of aggregate -Demographic characteristics of aggregate (age, sex, etc.)
4. Public Citizen (Legal Needs: "Legal" matters which affect everyone in the state equally eg. environmental issues, human rights, auto safety)	What are the legal issues which affect all members of society?	1) Are individuals aware of the legal system, legal rights, etc.? 2) How aware are citizens of public service agencies dealing with legal matters? eg. Ombudsman	1) What skills do citizens need in order to address their rights, take legal action, etc.? 2) What skills do citizens need in order to lobby society to address rights?	1) What resources exist to enable citizens to achieve rights, eg. educational resources, political representation, consumer groups, media support?	Phone or mail surveys - sample population Community forums House to house surveys Inventory of resources	-Demographic characteristics -Size of citizens group -Location

CHART ADAPTED FROM PUBLIC LEGAL INFORMATION NEEDS IN CANADA: TOWARDS A CONCEPTUAL FRAMEWORK, by Steven Brickley and Dennis Bracken, Dept. of Justice, Ottawa, 1982.

2.5 Techniques for assessing needs

There are a number of commonly used research methods for assessing needs of groups or individuals. Each requires a different application of time, energy, financial resources and expertise. Some methods (e.g. sample surveys) are more accurate than others (e.g. key informant approach). To choose your method of assessing needs, consider your group's capacity to undertake needs assessment -- the amount of time and money available, the expertise your group has and your willingness to coordinate the process

Table 2 summarizes eight needs assessment methods, their use, advantages and disadvantages. For more detail on how to use these methods, see Module IV, on gathering data.

TABLE 2: SUMMARY OF NEEDS ASSESSMENT APPROACHES					
Method	Description	Recommended Uses	Advantages	Disadvantages	Other Comments
1. Key Informant Approach	- Identifying, selecting and questioning knowledgeable leaders about needs in community or group (questioning may be done face to face, or through mail or telephone interview surveys)	- To assess group needs - To assess target populations (individual needs)	- Simple - Inexpensive - Can involve group or community leaders in program planning at an early stage	- Biased according to individuals being surveyed; they may not reflect the opinions of groups or citizens - Size of group may not provide valid information - Not an exact method for assessing needs (May be questioned by funders. It is a supplement to other approaches.)	- Questions should be concrete and specific. - Choose people who are knowledgeable about community and its needs
2. Community Forum Approach	- Open "Town meeting" gathering of citizens in a community to present PLEI needs	- All levels of needs (individuals, groups) - May be used in tandem with the key informant approach	- Simple - Inexpensive - May encourage public involvement	- May not be well attended, especially if there is no burning issue to address. - May be biased - Hard to guarantee freedom of expression; some people may dominate - Not an exact method -- should be used jointly with other methods	- Questions around need should be concrete - May work better if several forums are held, each representing a different segment of the community
3. Social Indicators Analysis	- Use of population statistics to demonstrate need or dimensions of target group; eg. economic data, divorce rates, immigration rates, number of persons on welfare, using UIC, young offenders	- Could be applied to all levels of need from individual to specific group needs	- If data accessible then method is inexpensive	- Data may not be available, may not be current - Is based on the assumption that statistics can be translated into needs	- This method is best used as a rough guide to identify needs areas. - It may be useful to follow certain stats over a period, eg. rates of unemployment in certain areas may fall or rise sharply, thus indicating new needs for PLEI resources of programs
4. Surveys	- The surveying of a specific group, or (using a sample) population to assess needs. This can be done through questionnaires, phone surveys, interview. May require a sampling procedure and data analysis techniques	- All levels	- Are more focused on target population - May be the most accurate method of conducting needs assessment	- Likely to be expensive, depending on method chosen - Requires higher level of coordination and expertise from group	- This method is the most accurate and most widely accepted. However, it requires careful planning, expertise and more extensive group resources [See Module IV on data gathering.]
5. Demands for Information or Services	- The assessment of citizen or group demands for information or services, eg. PLEI requests to libraries, to social service agencies	- Public citizens needs - Individual needs	- Simple - Inexpensive - Data may be quite specific	- Data may be limited or not available - Data may not present complete needs assessment of target group, eg. not everyone uses a library	- This method is best used with other methods
6. Inventory of Resources	- The listing of resources, services already available to meet PLEI needs. This does not define the needs of individuals/groups but clarifies what services are available to meet needs	- To complete an overview of resources available to citizens and groups	- Simple - Inexpensive	- Only lists resources does not explore their use or accessibility by target groups	- Is an integral part of needs assessment
7. Delphi Technique	- A questionnaire is developed which is distributed to a panel of resource persons whose opinions are valued. They are asked to rate the needs in order of priority. Results are summarized and returned to participants and the process is repeated	- To assess group needs - Useful for those who are widely dispersed	- Can be inexpensive - Good for surveying opinions in a closed group - Can solicit anonymous opinions -- group pressure is decreased	- Since needs are specified already, other may be excluded - Participants may be biased - May be time consuming - Requires coordination (design and monitoring team)	- Delphi can vary in complexity
8. Nominal Group Method	- A group of individuals is assembled which lists and prioritizes needs -- first as individuals, then in a group	- To assess group needs or needs of specific target population	- Simple - Inexpensive - Can be done in one time period - Removes group pressure--allows individual opinions to be expressed - Allows for creative opinions	- Requires experienced facilitator for group meeting - Is imprecise - Structure is highly organized -- may alienate some participants.	- Is an interesting process for most participants. Offers a good balance between individual and group opinions.

3.0 PROGRAM EVALUATION: DESCRIPTION

Program evaluation is a catch-all term to describe the different types of evaluation which focus on your programs' activities, internal functioning or impact. Over the years evaluators have developed a number of terms to describe different ways of approaching program evaluation. Some of these may already be familiar terms.

Cost-Effectiveness Analysis	Looks at program outcomes compared with the cost. Is usually done as a component of a larger evaluation.
Impact Evaluation	Looks at the impact of the program on the target group or other specified community.
Formative Evaluation	Looks at the day to day operation of the program and how it can be improved, while the program is in operation.
Longitudinal Evaluation	Looks at the impact of the program on participants over a period of time.
Summative Evaluation	Looks at the basic, over-all worth of a program, usually after the program is complete.
Goal Based Evaluation	To what degree and how well have program goals been attained.

The categories are not mutually exclusive, so don't expect your evaluation to fit neatly into one category. For example, you may do an impact evaluation combined with a cost-effectiveness analysis or you may do a formative evaluation on only specific components of your organization

such as staff recruitment or structure of the organization. You might only be concerned with looking at the value and impact of a certain publication or another teaching tool. The important thing is to begin with the questions or issues you need to address.

3.1 Current trends in program evaluation

Program evaluation has evolved dramatically from its beginnings prior to World War II. Initially, and especially in the United States, evaluation was based on the experimental model. A design was imposed, often using control groups, and the goal was to establish direct causality. Pre- and post-comparisons of target groups were common. These designs relied heavily on measurement, quantitative methods and statistical analysis. Most early evaluations, again especially in the U.S., existed in the education or health fields, and were directed from university settings.

In the mid-1960s there was a reassessment of evaluation methods. During this period, social programs in health, legal issues, women's issues, delinquency, and urban development came into their own. At this time program evaluation became a more common feature of government programs in Canada. The old experimental methods were inadequate when trying to deal with such large scale social programs where there were MANY factors to consider, when cause and effect could not be strictly controlled and where social impact was broadly defined. Program evaluation became much more concerned with process. Control groups were less emphasized. Evaluation designs became less rigid. Methods leaned towards the qualitative: personal interviews, analysis of documents, and observation. This orientation to evaluation is often called RESPONSIVE or NATURALISTIC evaluation.

There is still a conflict in the evaluation field between the value of the experimental model and quantitative (statistical) methods versus the naturalistic (qualitative) orientation. There is sometimes the view

(particularly from those not involved in program evaluation) that qualitative methods (interviews, observation, case studies) are not as legitimate as the "hard stuff" (statistics and measurement). It is our view that most PLEI groups will have to draw ideas and methods from both schools in order to produce effective, usable evaluation data. While the old experimental design days are probably over for program evaluators, there are many statistical and measurement tools which can fit well into a more "naturalistic" framework.

3.2 Evaluation of PLEI programs

The approaches mentioned in Section 3.0 are generally accepted within the field of evaluation but as categories they are not always relevant to PLEI groups. We have categorized five approaches which may be more meaningful. These are:

- ORGANIZATIONAL ASSESSMENT
looks at how the program is operating, everything from structure, to salaries to staff satisfaction.
- ASSESSMENT OF PROGRAM UTILIZATION
looks at who uses the program and to what degree. Often goes hand in hand with IMPACT ASSESSMENT.
- MATERIALS ASSESSMENT
looks at the materials produced by PLEI groups, e.g. their distribution, content and impact.
- IMPACT ASSESSMENT
looks at the impact of the program on the target group or other segments of the community.
- COST EFFECTIVENESS ANALYSIS
looks at the program's outcomes in relation to its costs.

These approaches are described in the sections which follow. Before reading about the approach which best meets your evaluation needs, it may be helpful to review the next section, called Steps in doing a program evaluation.

3.3 Steps in doing a program evaluation

Many of the tasks involved in a program evaluation are described in MODULE I, Planning Your Evaluation. The steps are reviewed below.

STEPS IN DOING A PROGRAM EVALUATION

1. Decide, with stakeholders, whether an evaluation is necessary.
2. Define evaluation problems and issues
3. Determine the basis for the evaluation: goals and objectives or problems and issues.
4. Determine evaluation goals and objectives.
5. Determine who will handle the evaluation (external consultant or internal staff)
6. Develop the evaluation design.
7. Sign an evaluation contract or agreement.
8. Determine evaluation methods.
9. Gather Data
10. Analyze data
11. Present findings
12. Utilize findings.

3.4 Organizational assessment

PLH staff often wish to review or evaluate particular aspects of their organization's structure or functioning. This process is often initiated by program staff or administrators, sometimes because of a problem which is affecting work or as a result of dissatisfactions which have surfaced. Some important areas to examine are the organization's goals and philosophy, its tasks, structure, human/social needs, and its relationship with external bodies. These aspects are discussed below.

3.4.1 Aspects of Organizational Assessment

The following questions will help you define the aspects you want to evaluate or review within your program. Use them as guidelines.

GOALS AND PHILOSOPHY AND VALUES

What are the organization's goals?
Who has determined the goals?
Is there a sense of staff unity around goals?
How often are goals revised?
What are the implicit goals? Is there a hidden agenda?
Is there a clear agreement on program philosophy? What are the differences and how do they manifest themselves?
What values are placed upon characteristics such as efficiency, professionalism, legal expertise, and personal warmth?

TASKS

What activities are staff involved in?
How much time do they spend on specific tasks?
Is work completed on time?
Is the division of labour appropriate?
Are job descriptions clear and specific?
Are job descriptions reviewed?

STRUCTURE

What is the structure: collective, democratic or hierarchical?
Does the structure reflect the goals and philosophy of the organization?
Is there an organizational chart?
Are there clear lines of authority?
What types of planning are done in the organization?
What is the communication system? Who communicates with whom?
How is communication handled? [meetings, memos, reports, etc.]
How is decision-making handled?
How is outreach maintained? Are offices regionally based or highly centralized?
Is evaluation carried out routinely? How is this done?

HUMAN-SOCIAL ISSUES

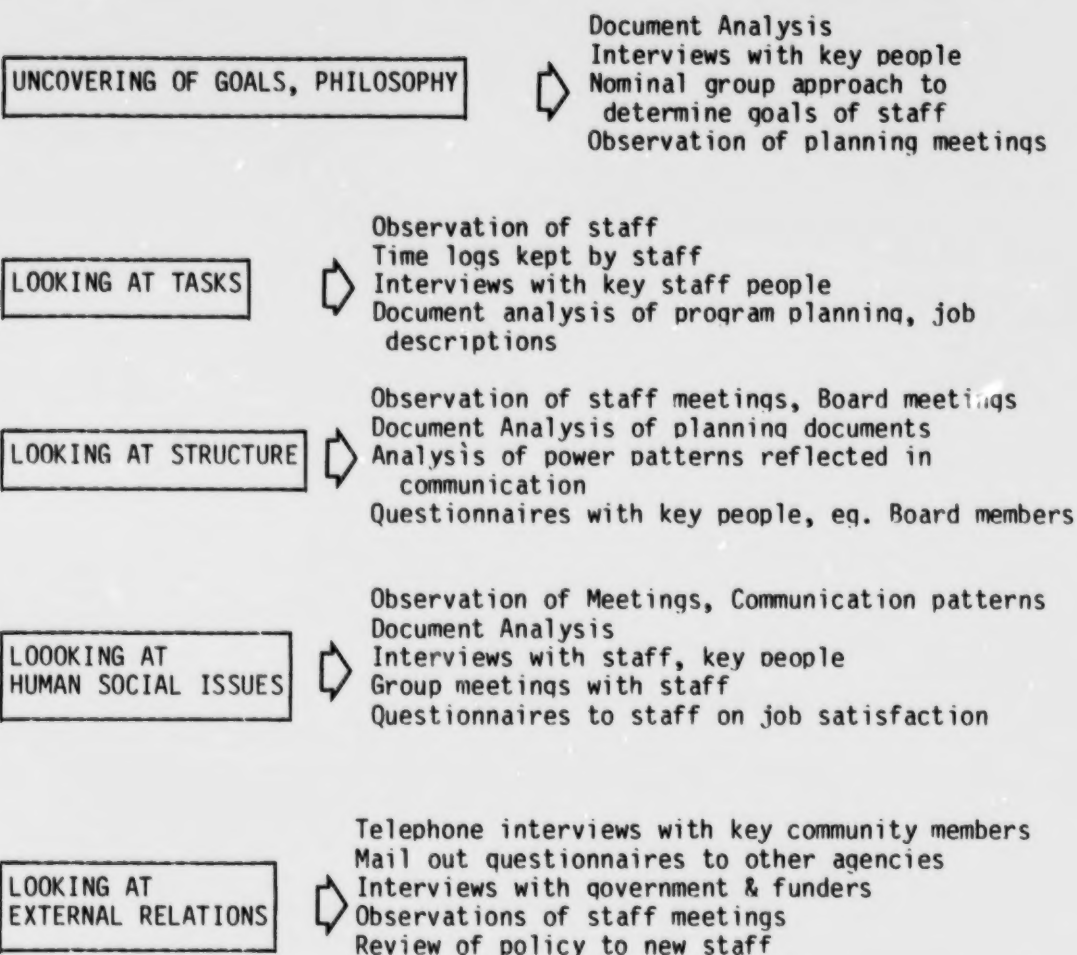
Who sets the dominant tone in the organization - lay people or professionals?
What are the staff recruitment & training methods? Do they reflect the needs of the organization?
Are volunteers involved in the organization? How are they recruited, used and rewarded?
What is the morale level of staff and board? What affects staff morale?
Does the staff "mix" reflect the target group?
What are relationships like within the organization?
Who has the real power? How is power manifested? (e.g. through experience, age, sex, verbal ability, etc.)
What incentives do staff have?
How are staff complaints handled? Are there appeal systems?

EXTERNAL RELATIONS

How does the organization relate to the community?
How does it relate to other agencies?
What resources does it use in the community?
What is its relationship with governmental bodies?
What is the relationship to the funder?
How open or secretive is the organization to new members?

3.4.2 Methods of assessing the organization

A wide range of evaluation methods can be used to address organizational issues. Some are summarized below. Further detail on these methods is available in Module IV, Data Gathering.



Often organizational assessment takes the form of regular review or monitoring. For example, your organization could regularly review the efficiency of staff by asking them to fill out time logs or keep track of work activities for a period of time. Or you may sense a problem that needs attention -- low staff morale, confused communication, or decisions not being translated into action. A number of evaluation methods might be used here such as confidential interviews with staff to determine their morale, a follow-through study on decisions to find out where the break-down comes, or observation of staff meetings. There is no one way of evaluating your organization.

3.4.3 What to remember ... and avoid

- It is not always important to have complete consensus on goals or philosophy within an organization. A diverse organization may reflect a diverse target group. It may mean the organization is rich in ideas. However, it may be a sign the organization can't make decisions easily or translate ideas into action.

- Organizational Assessment is usually very threatening to staff. Be aware that evaluation can be personally painful! Ensure and respect confidentiality.

- If a staff member is doing the evaluation their bias may jeopardize the value of the results. Try to choose staff members not directly involved in the aspect of the organization being evaluated.

- Use evaluation methods which are sensitive to the time constraints of staff. (i.e. don't ask them to keep detailed time logs if one of the problems is staff burn-out!)

- The organization may have a lot invested in the way it is organized. Evaluation findings may be rejected or take a long time to be reviewed or implemented.

- A comprehensive organizational assessment probably cannot be carried out internally but requires an external evaluator.

3.5 Assessment of program utilization

PLEI groups will almost always be interested in who uses their program, how, and to what degree. Funders usually require regular reporting on the number of people participating in a program. But an assessment of program utilization can go much farther than the tabulation of basic numbers. It can include looking at how accessible the program is (a program may be effective but not easy to get to or use). It can examine whether a specific target group is being reached (the program may be reaching a lot of people but hardly anyone in the target group). It may reveal whether an adequate percentage of people in need are being served (you might be serving people who have less need for legal information than others). These questions are complex ones and require effort to answer. In this section we propose to address these and other utilization questions.

3.5.1 How many people use our services/programs?

Most groups keep some statistics to answer these types of questions:

- How many people have participated in our program, on a monthly or annual basis?
- How many of these people are new participants? If repeaters, how many times have they participated?
- What are the basic characteristics of the participants?
- Has the usage of service increased or decreased?

Some or all of the following methods are used to gather these statistics:

- Telephone Logs - These record numbers of calls, type of enquiry, and perhaps basic information about the caller. If you want to follow up this type of information you may be able to ask for the caller's name, as long as confidentiality isn't important.
- Lists of those attending workshops - You can count the number of people attending or ask them to fill out short evaluation forms. Be sure to discriminate between those who are attending a workshop for the first time and those who have attended more than one workshop.
- Subscriber Lists - These record how many people receive newsletters or publications. You may also want to find out who has received material so you can do follow up directly.
- General Distribution Totals - This can include the gross numbers of publications and other material distributed to the public at large.
- Records of Drop-in clients - These include the numbers and names of people who have used a service in person.

These records should differentiate between those using the program on a one time basis and those participating more than once (for example, there is a difference in usage between one person phoning a PLEI telephone service 10 times, and ten people calling about separate matters). To find this out at a workshop, one could ask for a show of hands to indicate:

How many have come to a PLEI workshop before (in past six months)?
How many are newcomers?
How many have come to more than 2 workshops in the past six months?

Evaluation feedback forms given out to workshop participants can ask these same questions anonymously or can ask people to identify themselves by name and address on the questionnaire. However, people may be reluctant to do this, especially if the material being discussed is sensitive. They may be motivated to do so if you tell them you are compiling a mailing list of future events. Another way to estimate repeat attendance rates is to survey the number of repeat clients in a smaller sample, then apply this approximation to your total figure.

EXAMPLE

Total number of
people attending
Law Forums in
1984 = 5,672

A survey of a sample
of 8 classes determines
12% of participants
are repeaters

12% of 5,672 =
680
5672 - 680 =

4992 is total number of participants reached

This kind of tabulation can convince funders you are not "padding" your over-all total.

3.5.2 What kind of people use our services?

Most groups are interested not just in gross figures but wish to learn something about individuals using the program. What you wish to know depends on your program's goals. Age, sex, income level, marital status, ethnic background, educational level, and employment are useful demographic characteristics. These are not routinely asked for in basic records but could be assessed by surveying a small sample of participants.

If you want to get some fairly detailed background information from participants in workshops, classes or forums, it is advisable to ask them to fill out a questionnaire before the workshop begins. You could combine personal background questions with ones on what participants want to get out of the presentation. Collect questionnaires prior to the presentation. Be sure to explain why you need the data -- people may be uncomfortable about giving out personal information.

Often PLEI groups do not know who is receiving their publications. For example,

One PLEI group printed 1500 copies of a booklet on "Using the Family Court System". The book was available on a publications rack in the courthouse and was disappearing like hotcakes. But to whom was it going and for what purpose?

This kind of problem can be resolved by:

- A) Placing an evaluation form within the publication to be returned by mail. This usually results in low returns. Try offering an incentive to return the form. "Your name will be placed on a mailing list and you'll receive free notification of all our events", or "You'll be eligible for a complete package of all our legal publications. The draw will be held on December 21".
- B) Controlling the distribution points so that you have access to those who are taking the material out. Have somebody at the distribution point keep a brief log or checklist of 4 or 5 pieces of information about each person taking the material (e.g. age, sex, purpose of using the material, who will use it.)

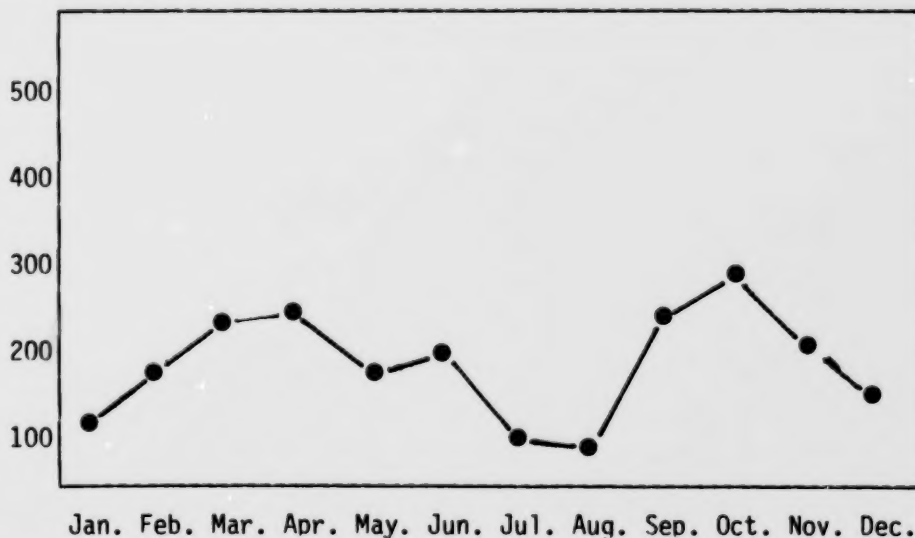
3.5.3 Have the number of program participants decreased or increased?

The fluctuations in the numbers of those using your services or program may tell you about the over-all utilization of the program (whether interest is increasing or decreasing) or simply whether utilization rates vary according to other factors like the time of year. It is useful to tabulate these kinds of data over several years in order to recognize patterns. They can be demonstrated by means other than just numbers (eq. linear graphs, pictorial graphs).

EXAMPLE 1: GRAPH OF WORKSHOP ATTENDANCE

Seniors Law Information Centre

Total workshop
Attendance by month



3.5.4 Is the program meeting the needs of a cross section of the public?

Many PLEI programs are not targeted towards a specific group but to the public in general. They are based on the philosophy that everyone has PLEI needs at some level or at some time in their lives

and that "legal literacy" is still quite limited. A more in depth utilization survey (see the example below) can suggest whether you are meeting the PLEI needs of the over-all population on a proportional basis.

EXAMPLE 2: SAMPLE UTILIZATION SURVEY APPROACH

- 1) Collect demographic statistics (e.g. age, sex, educational level, ethnic status, on a sample of the population you are serving.
- 2) Collect census data for the area you are working in
- 3) Compare the two sets of data to find out if you are serving population groups on a proportional basis.

Age Category	PLEI Services		Census Area #6	
< 15	121	(12%)	5674	(10%)
15-24	230	(22%)	11321	(20%)
25-44	366	(35%)	14100	(25%)
45-64	284	(27%)	17822	(32%)
65+	33	(3%)	6524	(12%)
TOTALS	1034	(99%)	55440	(99%)

(The problem with this approach is that it may be difficult to find a census area whose boundaries match those of your program.)

A survey such as this might indicate whether you need to place more emphasis on reaching certain groups in the population. In the survey above the data suggests the program is not reaching the older population as effectively as the younger and is biased towards those in the 25-44 age group. Unless, you can demonstrate that this age group has more PLEI needs (and you might be able to do so) your program is not meeting all PLEI needs on a proportional basis (You may wish to do a test of significance here - see Module V.)

3.5.5 Is the program accessible?

Programs, publications or audio-visual presentations may be well designed but may not be accessible to the public or a specific target group. If your organization is concerned with evaluating accessibility the following table describes some of the barriers which limit access.

For most PLEI groups it is unlikely that accessibility will be a major focus of an evaluation. However, most evaluations will include some issues relating to accessibility, especially if the target group is limited in some way (by money, time, language etc.)

TABLE 3: HOW TO EVALUATE ACCESSIBILITY OF YOUR PROGRAM OR SERVICE			
Type of Barrier	Definition	Evaluation Questions	Evaluation Methods
1) Geographical	How easy is it to reach the program?	-What public transportation is available to the centre? -How long does it take to get to the program? (if there is a specific target group). -What is the comparative utilization rate of various types of program components which are accessible by different means, eg. telephone, drop-in? -Can the physically disabled use the program?	1) Analysis of transport grids. 2) Analysis of distance to centre. 3) Use of utilization rates
2) Psychological and Cultural	Can different languages and cultural groups use the program? Are the program's facilitators and staff receptive and pleasant?	-Are publications translated into different languages? -Are staff representative of cultural groups being served? -Is the reception area pleasant? -Is the receptionist or telephone answer pleasant and patient?	1) Simple analysis of program documents 2) Survey of clients 3) Key informant approach
3) Time Barriers	Is the program Available to the community at convenient times, Are there reasonable waits for service?	-What are the hours of operation? Do they correspond to the needs in the community? -Is there a quick response for service? (A survey could be done keeping track of how long it takes to meet needs for PLEI)	1) Key informant approach 2) Client satisfaction survey
4) Financial cost barriers	Does the program prevent people from using it because of cost?	-What is the cost of the program? -Is the cost prohibitive to certain groups? Do fees encourage certain types of usage?	1) Key informant approach 2) Client satisfaction
5) Physical	Can the physically disabled, elderly, parents with children use the program?	-Analysis of the program's entrance, seating, facilities etc.	1) Ask a physically disabled group in community for assistance in evaluating

3.5.6 Which program components are most utilized?

Keeping total utilization rates may not be as useful as looking at utilization rates for different program components. Comparison, for example, of the utilization rates of a telephone phone-in, a series of law forums or a drop-in information centre may provide useful data upon which to assess and plan your programs.

3.5.7 Is our program being used by the target group?

Some PLEI programs have specific groups they have targeted to receive information. These groups may be fairly broad (women, school-aged children) or very specific (formaldehyde users, gay men and women in Montreal, farmworkers in the Fraser Valley, inmates in Archambault Prison). Whatever the group, it is usually important to know whether you are in fact reaching it rather than other clients.

Sometimes the fact of whether target group members are using your program is self evident, for example in the case of physically disabled people. At other times a simple survey, (either verbally, by mail or telephone) of those using your program will tell you whether you are reaching your target group. However, this information will still not tell you whether or not those utilizing the program are the target group members in most need of PLEI.

For example, your program may have been targeted at teen-agers and be reaching teen-agers, but not those teen-agers most likely to need or use legal information. To answer these kinds of questions

you must have specific information about the characteristics of groups and individuals who have the most PLEI needs. To find this out you must:

- a) Do a needs survey to pinpoint the groups with the greatest PLEI need, their specific characteristics and types of need. For example, single mothers, living below the poverty line with a grade 10 education or less may be shown to have the most PLEI needs.

Then AFTER your program has been implemented you must

- b) Assess (by survey or questionnaire) whether these types of individuals have been reached.*

You may be able to analyze your program users and make certain assumptions about their levels of need. For example, results from key informants, a meeting of group or community agency representatives or a community survey may indicate that certain groups in your community have specific legal needs. An analysis of your program participants for members of this group will indicate whether this group has been reached. Sometimes other social service or educational groups in the community have already done needs surveys which can help you define types of individuals in the population with major needs. For example, a survey by a Women's organization may indicate that women of a certain income, marital status and employment status have the greatest legal need.

Another way of looking at whether those in need (e.g. in a target group or population area) have been reached is to project the numbers which should be served annually and then compare these with your program's utilization rate. This procedure usually requires a more detailed analysis of needs to begin with. An example follows.

*PLEI is still a young field and as yet few studies have addressed whether certain socio-economic characteristics are predictors of PLEI need. In a recent B.C. Study on Legal Aid, the major predictor for volume of Legal Aid services was the number of single parent families with children under six.

EXAMPLE 3: COMPARING NEEDS WITH PROGRAM UTILIZATION RATES

1. Determine the level of PLEI needs in a specific group. For example, a survey of a sample of New Canadians in Toronto found that 21% of them had PLEI needs.
2. Through census data determine the number in your area which should be served, if that rate of need applies.
3. Through analysis of program records determine the % of those over or under-served.

Census Tract	Population of New Canadians (less than 3 years residence) over age 18	Expected number served (21%)	Actual Number Served	% Over or Under-Served
1	721	151	98	-35%
2	1463	307	298	-3%
7	874	183	302	+65%
	3058	641	698	+9%

Note: This method does not tell us whether the 698 persons served are those in most need of PLEI.

3.5.8 How can you determine whether the utilization rate of your program is satisfactory?

Sometimes this will be self evident when you look over your statistics. If your program is targeted towards the poor and only a small and unrepresentative number (according to the population in your area) of poor are using it, then you've got problems. However, many of the issues regarding utilization rate are subjective. Needs for PLEI cannot be easily ascertained, especially by small organizations. It is difficult to know whether utilization rates are "high enough" considering that the groups being targeted may be uncomfortable using

PLEI services. PLEI needs may also be met by groups other than yours.

Rigorous formulas for interpreting or evaluating (utilization) patterns do not exist. The Centre (program) itself must supply the meaning and interpretation of the patterns, and decide what program implications a particular pattern of use has.

(National Institute for Mental Health, 1979:123.)

3.6 Materials assessment

All PLEI groups produce legal information in diverse forms such as brochures, booklets, pamphlets, study kits, newspaper articles, audio-visual materials or teaching material. The value and effectiveness of this legal material is an important concern of most groups.

The main issues to consider when you are evaluating your PLEI materials are:

- The distribution of material - is the information getting to the right people? Is it being efficiently distributed?
- The readability of material - Is the PLEI material you produce understandable and relevant to its intended audience?
- The accuracy of material - Is the material legally accurate and up to date?
- The layout and design - Is the material attractively designed, pleasant to read? Does the design complement the content -- in other words, make it easier to understand?

The following section provides an overview of some ways these issues can be evaluated.

3.6.1 Distribution of materials

It makes no sense to have well developed legal information which never reaches its intended audience. Sometimes a failure in distribution may be due to poor organization.

An evaluation of a PLEI program directed towards libraries found that very few of the legal pamphlets libraries received were displayed or distributed. They were simply filed away in file drawers because libraries did not have the space or shelving to display them.

Distribution problems may also be the result of "political pressures" within a system.

One PLEI program which intended to distribute brochures on "Prisoners Rights" to prisoners were concerned that they were not reaching the target group. Guards and prison staff found them too threatening and weren't distributing them.

It makes sense for PLEI groups to regularly keep track of where their publications are going or how many are being distributed. This can be done by:

- Keeping detailed distribution records. This requires a contact person who is responsible for distributing publications at each distribution point. This contact person (or a central office) keeps track of the number of publications received and distributed over a period of time.
- If the contact person is unable and unwilling to keep this data on a regular basis, perhaps this can be done for a short term (1-6 month period). Send a form (listing the names of publications) with the publications for your contact to keep track of distribution. If you get a poor rate of return by mail, telephone your contact person to get the data. Or offer a free publication if they return the records.
- Calling or visiting distribution centres and talking to the distributors. This will enable you to see where the material is

placed. (e.g. Is it accessible, low-cost or free, well organized, attractively or neatly displayed?). Talk to the distributor about how well the material moves. This kind of "informal survey" can often provide a wealth of information.

- Assembling representative members of a target group (if this applies) in a "nominal group session" can provide information about whether members of the group are getting and using the material. Under what conditions are other members of their group receiving it? What are the barriers to distribution?
- Sometimes a more organized survey which examines distribution can be undertaken.

EXAMPLE

One library program surveyed all patrons (those over 12 years of age) in several libraries over a 6 hour period, asking them whether:

**They were aware of legal materials in the library.
If they had used them and why?**

This survey found that 47% of the patrons were unaware of the significant legal collections in their libraries. The results showed that even though PLEI material was being distributed by the PLEI program efficiently it was not reaching "50%" of the public.

3.6.2 Evaluating the readability of materials

Readability is the ease with which a document is read or understood. The readability of PLEI material is a significant issue because legal documents have traditionally been difficult for the lay public to understand and because PLEI materials are often targeted towards groups which have reading limitations (new Canadians, those with limited education.)

There are two main factors which influence readability. These are:

- A. READER-RELATED FACTORS -- conditions which rest in the reader. For example, the reader may have poor reading ability or a limited vocabulary.
- B. TEXT-RELATED FACTORS -- conditions which relate to the material itself. For example, the reading material may contain too much legal jargon, be poorly organized or difficult to understand.

Frequently, attempts to assess the readability of PLEI material have focussed only on the difficulty of the text. There is a commonly held assumption (not always true!) that short words and short sentences are easier to read. Standard readability formulas such as the LIX index or the Flesch formula measure things like number of words per sentence or number of syllables per word.

While these formulas do provide one indication of the readability of printed material they neglect other important issues such as whether the material is understandable to the reader. Whether the material is understandable depends on other factors such as whether difficult words are used in context or whether concrete examples are given.

3.6.3 What makes PLEI material readable?

The following are some of the factors which enhance the readability of PLEI material.

1. The level of reading skill of the target group needs to be defined so appropriate material can be developed. There are three general categories of readers:
 - a) A beginning reader with little experience;
 - b) A middle level reader with limited experience reading technical language;
 - c) An experienced reader who has experience with technical language.

2. The material should reflect the real experience of the person and be concrete. Compare the following:

EXAMPLE #1

You've just started working as a waitress at the "Downtown Cafe". It's your third day and the boss has asked for a kiss. When you tell him you're not interested he says he might fire you if you don't co-operate. You need your job. What can you do? Our province has laws which deal with this type of problem.

or

EXAMPLE #2

Human Rights Legislation in our province contains provisions for dealing with sexual harrassment cases.

3. The material should use words which are recognizable to the target group. If words are not likely to be familiar, they should be defined in the text.
4. The material should be organized in a way that is relevant to the reader. For example:

.... Last year at Legal Services we were working on a card which would explain to battered women where they might go for help. Our first draft was organized under the following headings: Transition Houses; Legal Aid; Family Court Counsellors; Ministry of Human Resources, etc.

What we were doing was organizing according to category of service. We were starting from the system's point of view. But was this the most relevant way to do it? What approach would the assaulted women have to her own needs?

We reorganized the headings thus: Do you need a safe place to stay? Do you need legal help? Are you thinking of leaving the relationship? Do you need financial assistance?

(Darville and Reid, 1985: 54-55)

3.6.4 How to evaluate for readability

We recommend two approaches when assessing the readability of publications:

- 1) The use of a readability formula which gives an approximate measure of the readability of documents. The Flesch Formula is reproduced below. There are others which are equally useful. Remember, this gives only an approximation and should be used with
- 2) Organized feedback from target group members, experienced lay legal writers or those experienced with teaching English as a second language.

A.

The Flesch Readability Formula

*

This method is most useful for longer pieces. Choose several samples of writing (e.g. a couple of paragraphs at the beginning, middle or end). Test only the running text of your piece of writing. Skip titles, headings, subheads, section and paragraph numbers, captions, date lines and signature lines.

*The following steps are taken from Flesch, 1979: 23-24. The examples are supplied.

Step 1. Count the Words

Count the words in your piece of writing. Count as single words contractions, hyphenated words, abbreviations, figures, symbols and their combinations, e.g. wouldn't, full-length, TV, 17, &, \$15, 7%

EXAMPLE
Number of
words 118

Step 2. Count the Syllables

Count the syllables in your piece of writing. Count the syllables in words as they are pronounced. Count abbreviations, figures, symbols and their combinations as one-syllable words. If a word has two accepted pronunciations, use the one with fewer syllables. If in doubt, check a dictionary.

Number of
syllables
158

Step 3. Count the Sentences

Count the sentences in your piece of writing. Count as a sentence each full unit of speech marked off by a period, colon, semicolon, dash, question mark or exclamation point. Disregard paragraph breaks, colon, semicolons, dashes or initial capitals within a sentence. For instance, count the following as a single sentence:

Number of
sentences
9

You qualify if --

- 1) You are at least 58 years old; and
- 2) Your total household income is under \$5,000

Step 4. Figure the average number of syllables per word

Divide the number of syllables by the number of words.

1.34

Step 5. Figure the average number of words per sentence

Divide the number of words by the number of sentences

13

Step 6. Find your readability score

Find the average sentence length and word length of your piece of writing on the chart. Take a straight-edge or ruler and connect the two figures. The intersection of the straightedge or ruler with the centre column shows your readability score.

Use chart
(following
page)

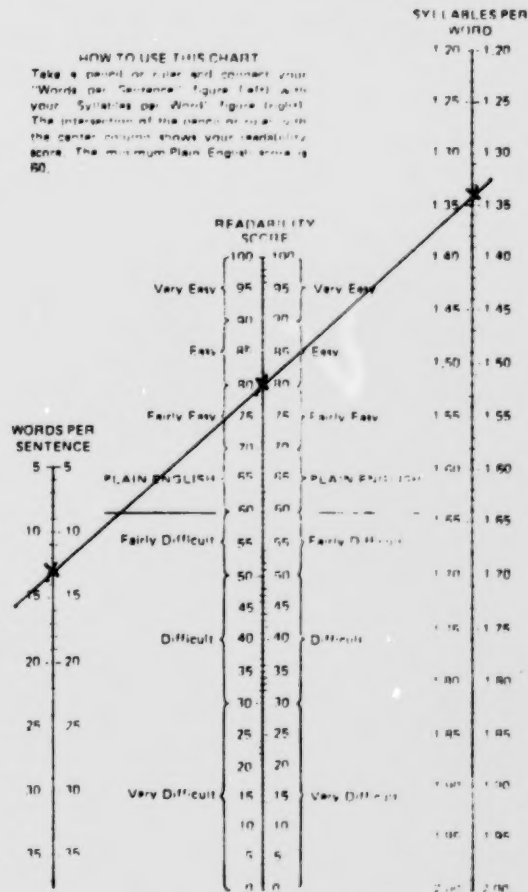
Score is 80

You can also use this formula:

Multiply the average sentence length by 1.015. Multiply the average word length by 84.6. Add the two numbers. Subtract this sum from 206.835. The balance is your readability score.

The scale shows scores from 0 to 100. Zero means practically unreadable and 100 means extremely easy. The minimum score for Plain English is 60, or about 20 words per sentence and 1 1/2 syllables per word. Conversational English for consumers should score at least 80, or about 15 words per sentence and 1 1/3 syllables per word.

TABLE 4: FLESCH READABILITY CHART*



*From Flesch, 1979: 25.

B. Organized feedback

Because readability cannot only be judged by a readability formula it is important that PLEI material be evaluated by those for whom the material has been designed or by experienced PLEI writers. Here's how you can do this.

- Material can be given to individual target group members and then discussed privately. Ask each person to explain what the material said. For example: "After reading this, what do you think 'Sexual Harrassment' means?" "What does Family Court help you do?"
- Ask several target group members (e.g. immigrant Canadians, native people, farmworkers) to meet together and comment on the material in a round table discussion. A facilitator can pose questions such as: "Are there too many legal words?" "What could be explained better?" "Does the example make sense to you?"
- Ask an English as a Second Language (ESL) teacher to give out the legal material to his/her class. Ask her to gather feedback on how well the material was understood. A quick test of the concepts might work here.
- Assemble a "panel of readability experts" to review PLEI material for readability. This could consist of 3-5 people with ESL experience, or those working in literacy programs or with lay legal writing experience. Ask them to review and analyze the documents using these questions as a basis.
 - i) Who is the intended reader of this material? Who is it most likely to reach?
 - ii) Is the material organized in a logical way to the reader?
 - iii) How is legal language used? Are terms defined?
 - iv) Are sample cases given? Do they relate to the lives of the intended audience? Are other concrete examples used?
 - v) Is the design clear?
 - vi) Over-all, how difficult is the text?

(Questions adapted from Darville and Hiebert, 1985: 120.)

3.6.5 Is the material accurate?

Since laws change fairly frequently, maintaining the accuracy of PLEI publications is often difficult. It is important that published material be reviewed for legal accuracy so that changes can be recorded and, if there are subsequent printings, be incorporated into the material. The type of review policy your organization adopts will depend on its size, complexity and the number and type of publications it produces. We recommend that:

- A contact person within the organization be responsible for the on-going review of materials for legal accuracy. This person should be familiar with the publications and the areas of law involved.
- The contact person should assemble an informal legal network either inside or outside the organization which would inform her of any changes needed in the publications.
- All the published material be reviewed on a regular basis according to the level of legal complexity of the material. For example, legal material dealing with the Charter of Rights might require annual review while that dealing with "How to write a will" might require a less frequent review. This formal review should be done by legal experts such as lawyers with expertise in the field.

Most large PLEI organizations do a review for legal accuracy of their publications prior to their being reprinted. If material is found to be inaccurate and there is no budget for reprinting, the material can be discarded, or amended by a page insert or a sticker placed over the inaccurate passage. This is useful for small publications or brochures.

Most PLEI organizations are faced with the reality that not all the material they publish will remain accurate. For this reason a caveat is often placed in each publication explaining that the information is subject to change.

3.6.6 Controlling legal accuracy at the distribution centre

PLEI organizations can usually find strategies for maintaining legal accuracy of their own material. But what happens if other organizations, less informed about the law, do the distribution?

An evaluation of a PLEI program which distributed legal information to libraries found that some inaccurate material was being kept on the shelf because libraries did not have the expertise to review and cull it. In several small libraries it was felt that some legal material (even if inaccurate) was better than no legal material.

How can you assist the distributors in reviewing material for legal accuracy and discarding or replacing it if necessary? It is

unlikely that staff at distribution centres such as libraries and social agencies will have the legal expertise to judge the accuracy of the material. However, it is important for you to have a contact person at each distribution centre to whom you can send updated copies of publications and information about inaccuracies. One PLEI library program sent out "bulletins" to librarians telling them which materials were out of date and should be discarded. A "spot check" of several distribution centres (eg. libraries, social agencies) can give you an idea of whether materials are current or what problems exist in maintaining accuracy. If currency and accuracy of distributed materials looks like a serious problem and you wish to undertake a comprehensive review, a mail or telephone survey of agencies distributing the material would provide useful information. The survey would include the names of a number of PLEI publications (both current and out of date) and the respondent would be asked to check off the material still in use.

3.6.7 Layout and design

PLEI material may be accurate and well written, but the layout and design may be so poor that people don't pick it up from the shelf or book rack. Even if they do, poor design may make it difficult to read.

There are many factors which result in attractive design that is pleasing to the eye and easy to read. [For a look at some basic suggestions for PLEI material see Darville and Reid, 1985]

SOME BASIC DESIGN GUIDELINES FOR PLEI MATERIAL

- use familiar, easy to read type faces.
- don't overwhelm with print -- use graphics, photographs to break up print
- use graphics that portray real situations or those experienced by the intended audience. Put the graphic next to the text it corresponds to.
- organize the material in a logical way.
- use techniques for emphasis -- boxes, italics, bold print or capitals -- but don't overuse.
- experiment with techniques like comic books, but be wary of cartoons -- they aren't understood by everybody.
- use contrasting colour for effect but make sure the degree of contrast makes the print readable.
- glossy paper is sometimes alienating to people -- but newsprint may be too transparent.
- use indentations or line separations to emphasize points

Here are some procedures for reviewing PLEI material for its layout and design:

- Assemble a "panel" of people experienced in design and layout (local printers, PLEI writers or designers, graphic artists). Ask them to informally review several of your publications looking at issues such as: the ability of the material to catch the eye, maintain interest, the relevance of graphics, and the match of layout and design to target group. Your group supplies a facilitator to direct the panel and record comments.
- Assemble a panel of "ordinary people" or target group members (for example, representatives of target group organizations) and ask them to comment on the design and layout of the material. Again, give them specific issues to comment on and have a facilitator organize the meeting.
- Ask a graphic design teacher to submit several publications to a graphics design class (for example, at a community college) and solicit comments. Such classes are often looking for community projects.

If you ask graphics experts to review your publications, be aware they may not be sensitive to the needs of your target groups. They also may expect to be reimbursed. This does not always have to be by money (how about a complete set of legal publications, some free legal advice, or a free subscription to the Legal Resources Journal?)

3.6.8 Evaluating audio-visual presentations

A. Evaluating prior to public viewing

You may wish to have an assessment of an audio-visual presentation prior to public viewing. If your production has been expensive, any critical feedback after production is probably too late to incorporate. For this reason we recommend that target group members be involved in the planning process of the production so that they can provide on-going feedback. If there is an opportunity to change the production or if you want to assess future public reaction, assemble a group of target group members or people in the community (Native people, new Canadians, single parents) or those with experience in the subject matter (eg. Counsellors for battered women, Native courtworkers) in a round table discussion. Ask them for feedback on issues such as:

Is the film understandable to you or the target group?

What does term "x" mean?

What is the procedure for obtaining "x"?

What is the main message in the film?

Are there items which may confuse or offend someone?

Is the sound clear?

Is the film the right length?

Is the film interesting? Boring?

B. Evaluating after public viewing

Your organization may produce audio-visual materials such as films or television programs directed towards the general public or specific audiences. If the material is produced for a group that is well-defined (e.g. a slide show on pesticide laws for farm workers) the evaluation can utilize common evaluation techniques such as interviews, questionnaires, or community forums (on a small scale) to solicit responses from the target group. The members of a target group can be surveyed at a location where they congregate (children at selected schools, young people at recreation centres, new Canadians at ethnic centres, Seniors at drop-in programs). Sometimes a quick oral survey can suffice. If you do undertake such a survey be sure to keep the questions simple and to the point.

EXAMPLE

Hello, my name is Sara White, and I'm doing some research for the Legal Network. We are trying to find out how many people watch the program Youth and the Law on Cable T.V. Could I ask you two quick questions?

1. Have you ever watched the program "Youth and the Law" on Cable 10 on Tuesday nights?
2. If yes, do you watch it regularly (every week) or just occasionally?

Thank you

If a presentation is directed towards the public at large (e.g. a cable T.V. program on Human Rights) but there is no clear idea of who the audience is, evaluation methods need to be more creative. Cable Television networks do not utilize ratings surveys because they are not in competition with the commercial networks. It is unlikely that PLEI groups will ever be able to do large scale telephone surveys to assess general public response to a television program, but there are other techniques for soliciting opinion.

- Tags at the ends of programs (e.g. "Call this number if you want more information on Youth and the Law") The number of calls can indicate level of response and callers can be asked a few basic questions such as "Why did you watch this program?" or "What interested you most about this program?"
- Viewers can be given a phone number to which they can address program comments. They are most likely to do this if there is a product give-away:

This program has been sponsored by the Women's Legal Information Centre. We'd like to know what you thought of it. Please call us with your comments at 282-2222. The first ten calls will receive FREE copies of "A Woman's Legal Resource Guide".

The above methods will give you a very general indication of how many people might be watching, what kind of people they are and what their response is.

There may also be ways you can "piggy-back" questions about television programming onto other social programs. For example, legal clinics in your area could survey all their clients for a specified time period to see what the proportion of viewers was. Law teachers might be willing to survey their classes. Community programs for Seniors might allow you to survey their members.

3.7 Impact assessment

Impact Assessment is evaluation which looks at the impact or effect of a program on the individual, group of individuals or community. In PLEI, some examples of Impact Assessment questions are the following.

Does this PLEI program change or increase people's knowledge of the law?

Does this PLEI program change people's behaviour towards the law or legal structures?

Does this program change people's attitude towards the law?

How do people use the information they have acquired in our program? (to increase their general knowledge, to solve a personal legal problem, to assist a friend or relative, to consult a lawyer more confidently?)

How long have people retained legal knowledge?

Has the PLEI program had other, non-legal consequences? (for example, does providing PLEI to new Canadians help them become more acculturated? Does giving young people legal information decrease delinquency rates?)

Most PLEI program staff want to do some type of impact assessment in order to find out whether their programs are meeting their goals or working as well as they can. Funders usually require some concrete proof that their money is being used effectively.

3.7.1 Problems associated with impact assessment

There are many problems associated with impact assessment. First, there are many factors other than your program which may cause impact. For example, your organization may have sponsored several workshops on Human Rights which you hope will lead to increased awareness of Human Rights laws and issues. But the workshop may coincide with a series of articles in the local newspaper about an important Human Rights case. It would be difficult for an evaluation to discriminate between the impact of your workshop and that of the newspaper articles.

Second, there may be many possible causes of impact within an organization. For example, your evaluation may demonstrate that your program on Youth and the Law has increased knowledge about the law, but not explain why. Was it because of the method of presentation, the readability of materials, the friendly manner of the lecturer, the receptive mood of students (who were missing regular school), or the fact that rock music accompanied the PLEI film strip? In other words, in the world of PLEI programming it is difficult to associate one cause with one effect.

Finally, most social and education programs, because they operate in a public, complex world, will likely have only small impacts. It might sound impressive to state that your program is going "to change attitudes towards the law", but this is hardly likely considering how complex attitudes are and how long they take to change. Many impact assessments are disappointing because program goals are unrealistic and exaggerated and can't be attained, no matter how effective the program or hard-working the staff.

The critical issue in impact evaluation is therefore whether or not a program has produced more of an effect than would have occurred "naturally", that is, either without the intervention or compared with alternative interventions (Rossi, 1982:169).

3.7.2 Conditions for doing an impact assessment

Two conditions must be met within a program before an Impact Assessment can take place.

- a) The desired outcomes of your program must be clearly specified.
This is usually done by defining goals and objectives.

EXAMPLE

A goal of the Children and the Police project is to increase knowledge among 10 and 11 year olds in the school system about the role and functions of the city police department.

Some goals may require a long time to measure. This is especially true if you are trying to change attitudes. In order to evaluate more effectively you may want to break the goals into phases (e.g. this goal is to be accomplished in Year 1 and this in Year 2).

(See MODULE I, Section 17, How to Develop Goals and Objectives).

- b) Your program must be implemented as specified (in your goals) and have been delivered to the correct target group.

It may appear self evident that a program must be implemented before it can be evaluated, but often the implementation is incomplete or is poorly documented. There can be many aspects of implementation, and these must all be understood and described prior to doing the Impact Assessment. Some questions to ask about the implementation are:

Does the program exist?
What is being done?
How is it being done?
What aspects of the program might be having an effect?
What effort is being put in by the staff?

EXAMPLE

The Northern Ontario Law School Program wanted to evaluate its law information program to Native people in the area. Before it did the evaluation design it had to look at the scope of the program, who it was being delivered to, what information delivery methods were being used and the factors which might be having an impact. After it did this analysis it was decided that looking at over-all impact would not be effective because delivery methods were too diverse. A design was developed which compared different types of delivery (small group forums, printed materials, travelling bookmobile, filmstrips). It looked at which type of delivery led to the greatest retention of legal information and met with the greatest client satisfaction).

Information about implementation can be gathered through program records, interviews with a few key staff and by program observation.

After goals/objectives have been clarified and implementation issues discussed, a design to undertake the impact evaluation can be developed.

3.7.3 Impact assessment issues

The following are some issues which relate to the measurement of impact. Keep them in mind when you are evaluating your program.

- You can't always measure goals in their entirety. You may have to take one or two measures which will most adequately represent the goal.

EXAMPLE

A PLEI organization in Ontario has developed a number of Consumer Law Publications which it hopes will provide Seniors with information about contract sales so that they can protect themselves better against consumer fraud. The group hopes to change attitudes among Seniors (make them more sceptical). They don't have the money to do a full scale attitude survey or to interview Seniors but they do have access to police records of consumer fraud for a three month period before and after the PLEI campaign is introduced.

- There may be other explanations for the same impact. People acquire information in different ways. A battered woman may receive legal information from your booklet or from her sister. A young person may change attitudes towards the law simply because he's maturing.

- Those you reach through your program may be the most likely to change anyway. Studies have shown that those most likely to participate in social programs are most likely to seek information elsewhere. This is known as self-selection.

3.7.4 Experiments

There are two main types of impact assessment you can do. One uses an experimental or quasi-experimental model to arrive at outcomes. In these approaches groups are often compared, or one group is compared with itself before and after it receives a program. Experiments can be costly and complex to implement. It is likely that you will need to consult with an evaluation expert in order to develop an experimental design or do the statistical analysis that will be necessary.

A second approach to doing impact assessment is by using a number of non-experimental methods in a well developed manner. These models are also outlined below.

A) Randomized experiments

True randomized experiments categorize the subjects under study into two or more groups at random. A typical approach is to compare the outcomes of subjects from a control group (in which no one received the program) to subjects in an experimental group (which received the program). To assess the difference in the groups a variety of means is used -- pre and post tests to measure knowledge or attitude change, questionnaires, or interviews. Attitudes and knowledge can also be measured at various points after program implementation. This is called a time-series design. Statistical tests are usually applied to measure the significance of differences between the groups (See MODULE V -- Analyzing the Data). Experiments are often costly and require expertise to implement. There are usually ethical problems to be considered in withholding a program from some and giving it to others. In the PLEI field, the most frequent use of true randomized experiments is in school settings.

EXAMPLE

An Ontario PLEI program is attempting to increase utilization of Family Court Services. Each potential user is placed randomly into one of these groups:
Control Group - receives no information about Family Court prior to contacting staff.
Experimental Group - receives a basic orientation to Family Court through a self-operated video and a brochure.
After 3 months the groups are compared according to their use of and attitude towards the Family Court System.

B) Non-randomized experiments using a "constructed" control group

An alternative approach to a randomized experiment is a non-randomized experiment with a constructed control group. This is done by comparing a target group (which has received a program) with another group which has not received the program but is very similar (for example, Grade 12 students from two high schools in similar socio-economic areas). In order to develop a constructed control group, the factors which are most significant within the group have to be matched as closely as possible. Common characteristics used in matching individuals are:

age	occupation
sex	ethnicity
educational attainment	I.Q.
socio-economic status	labour force participation
home ownership	
marital status	

There are two types of matching which can be done. In individual matching a partner is chosen to match the person in the experimental group according to factors such as age, sex etc. Aggregate matching does not match individuals but the over-all characteristics from each group are the same.

The groups in a constructed control group experiment are evaluated either before and after the program has been put in place, or in a time series.

EXAMPLE 4: USING CONSTRUCTED CONTROLS

OBJECTIVES OF THE POLICE OFFICER IN SCHOOLS PROGRAM. The main objective of the project under study was to "bring about more positive attitudes toward the police" on the part of students and "to contribute to the improvement of relationships between youth and police officers". The study examined the changes in student attitudes after the operation of the program and the attitudes of teachers and principals to the project.

METHODS. A preliminary evaluation was carried out in June, 1972, after the police officers had been in the schools for two months, in order to determine whether the project should be extended. It was followed by evaluations in November, 1972 and June, 1973 comparing students in experimental schools (where the program was operating) with those in control schools (adjacent to the experimental schools). The students were tested twice using a 38 item scale of student attitudes towards police officers; the differences were statistically evaluated. Student suggestions regarding improved student-police relations were summarized, and the reactions of teachers and principals to the project were analyzed.

RESULTS. The responses of the students in the control and experimental groups were statistically analyzed and presented in tabular form, showing the significance of changes in attitudes and differences between groups. The author concluded that the police officer's involvement in the schools allowed the students to have a more positive attitude towards the police than that held by the control group.

Summary of the Evaluation of the Involvement of a Police Officer in Schools in the Killarney District.
CLIC Abstract #133

3.7.5 Non-experimental methods of assessing impact

Experimental methods for assessing impact use statistics to analyze data. (ie. Is the difference in outcomes between the control group and the experimental group statistically significant?) (See MODULE V). Unfortunately, statistical analysis may exclude important evaluation information on the program's goals or accomplishments, strengths or weaknesses. While an experimental design may appear to

be the most "objective" approach it is not appropriate to many types of PLEI programs.

.... a small native North American alternative school has been granted funds to run an innovative crime prevention project with parents and students. The program is highly flexible; participation is irregular and based on self selection. The program is designed to be sensitive to Native American culture and values. It would be a perfect program for formative, responsive (qualitative) evaluation ... Instead, program staff have been forced to create the illusion of an experimental, pretest and posttest design. The evaluation design has interfered with the program, wasted staff time and resources, and is an example par excellence of forcing the collection of worthless information under the guise of maintaining specific standards.

(Patton, 1978, 227-28)

The following are some other approaches to collecting data on impact assessment which do not use the experimental approach. They are likely to be more suitable for most PLEI programs.

- A) Before and after studies - compare program participants before and after they have been involved in a program. This can be done through comparative testing of knowledge or attitudes. The objective is to see how much participants have changed as a result of the program. Whether the program is the only cause of a specific change has to be determined subjectively; the change might have occurred anyway, because of other factors.

EXAMPLE

Grade 5 students from three schools were given a 50 point questionnaire to assess their knowledge of the court system and law pertaining to the Charter of Rights and Freedoms. Three months after the curriculum on Basic Law Issues was given, the students were given the same test to record changes in level of knowledge.

- B) Follow-up studies - In this method subjects are not tested prior to their involvement in a program but are tested afterwards. It is not possible to estimate how much the program has affected them in precise terms because it is not known what their prior level of knowledge or competence was. Despite its faults, this type of impact assessment is the type used most frequently.

One useful adaptation of this method is to do the follow-up study in a time series (see p. 102) to assess how PLEI is retained or used over a longer period of time. In order to do a time series the participants must agree to be followed up and you must keep track of their names and addresses.

EXAMPLE

A program for physically disabled people in B.C. was provided with a basic course on the legal system, and how to use legislation relating to the handicapped. Two sets of follow-up interviews with a sample of the recipients (one 3 months after the program, one 8 months after the program) looked at: how much of the information had been retained, how it had been used, what impact it had on the individual and on his immediate support system.

Interviews and questionnaires are the most common methods of doing follow-up studies but a telephone survey or even a group discussion by participants can provide useful information.

- C) Self ratings - In this type of impact assessment, program participants are asked to define the impact of the program on themselves. Interviews or questionnaires are the methods most commonly used to acquire the information. Participants are asked to evaluate the degree to which the information has assisted and how it has been used in their lives. It is helpful for the evaluator to give close-ended questions as well as open-ended questions. To do this s/he must be aware of the various possibilities for impact.

Sometimes the ratings of others can be used to complement self ratings (e.g. those working directly with disabled people might be able to provide more insight on how the information was used by their clientele).

Self ratings are highly subjective and this is their strength and weakness. It is useful to have recipients define what they saw as the benefit or impact of a program -- who else can answer for them? Client comments can be used to make the program more attractive. Sometimes, however, participants are reluctant to put forth any negative assessments because they fear this might result in the program losing its funding. They might also be uncomfortable being critical. To remedy this be sure to explain to the participants that honest feedback is more useful to you.

A second concern about self ratings is that impact is not always immediate -- information which is not relevant at the time may become relevant sometime later. This may be dealt with by asking participants to complete not just one self rating, but several over a longer period.

3.7.6 Other indicators of impact

There are many other sources of information which can provide an indication of impact. The following are some suggestions.

Changes in
Offense
Patterns



Changes in level of offenses before and after a PLEI information program. The impact of a community education program on drunk driving was assessed by comparing the number of offenses before and after the program was implemented. Changes were represented by a line graph.

Changes in
demands for
service



The changes in use of a legal resource after a PLEI program has been implemented. A group of agency representatives was provided with extensive information on the function of a new Child Advocate. The impact assessment looked at the number of clients using the Child Advocate and their referral sources. This was done by means of a short questionnaire given out at Family Court.

These indicators do not take into account other factors or conditions which may have caused the impact, such as newspaper articles on the effects of impaired driving. However, sometimes the influence of these factors can be assessed.

3.7.7 A Design plan for a non-experimental impact assessment

Because PLEI programs have many components which may result in a wide variety of impacts, a more comprehensive approach to impact assessment is sometimes necessary. This approach usually requires an outside evaluator with experience in the PLEI field to address the program's impact around a range of issues. Program participants are carefully described, and some before and after measures of their progress are made. The evaluator uses a number of tools to look at impact, such as observation or interviews with key participants and staff. This kind of assessment offers a good overview of the program

and its impact, but cannot state categorically that a specific program is the direct cause of a specific impact. Use of an external evaluator may be useful for new programs.

The following are issues which could be addressed in a fairly comprehensive impact assessment plan.

1. Review of program records and other documents to describe:
 - Size of program.
 - Geographical scope of program.
 - Target group(s) -- age, sex, ethnicity, income and educational level, etc.
 - Methods of participant recruitment.
 - Date of entry and exit into program of participants.
 - Costs per program participant.
2. Assessment of experience of participants in program -- motivation, satisfaction levels.
3. Before and after measures of program participants in areas related to goals (e.g. changes in attitudes, behaviour or knowledge related to PLEI.)
4. Observation of aspects of the program, eq. workshops, (to observe physical setting, program functioning).
5. Interviews with key people (staff members, administrators, Board members), about program's functioning and worth.
6. Interviews with people external to program about program's functioning and worth to the community (eq. other agencies, government, funders).

3.8 Cost effectiveness analysis

The section will outline some of the hopes for cost effectiveness in the PLEI field, explain some of the difficulties which arise and then suggest some ways in which costing, cost effectiveness and utility analyses can be approached.

3.8.1 Current hopes for cost effectiveness analysis in PLEI

When we contacted PLEI groups across Canada during the preparation of this resourcebook, they often expressed a hope that manageable and useful techniques for cost benefit analyses were

available for use in the PLEI field. Much of this concern was pragmatic. Groups naturally wanted to be able to "justify" their program from a financial standpoint to their funders, many of whom were tightening their own belts during a period of economic restraint. Another concern ran deeper. Some groups had been in the PLEI game for as long as 10 years, and they wanted to assure themselves that it was more than a game, that they were in fact having an impact. Part of this impact was a hope that somehow they were saving somebody money. A third hope was that cost effectiveness techniques could be used for planning purposes, to help make rational decisions about allocation of limited funds for new and existing programs.

Underlying these concerns were two basic questions:

- Can a "value" be placed on various PLEI programs?
Currently, for example, the "value" of a workshop, judging from many current PLEI annual reports, is expressed in terms of the length of the workshop and the number of participants. Some groups expressed a need for a more useful indicator that involved cost factors.
- Can programs be compared from a standpoint of costs and benefits?
This question concerned comparisons between programs of the same PLEI group, and between PLEI groups themselves.

3.8.2 Determining costs and benefits for PLEI programs: difficulties and solutions

Practitioners in the PLEI field are aware of how young their field is. There is a tendency to feel that other disciplines "must have been around longer and have their act together." If you are thinking of cost benefit analysis as one of these disciplines, this

statement is only partly true. Cost benefit analysis emerged in the 1930's as a guide to public investment activities such as water resource development and transportation, and after World War II, was applied internationally to industrial and technical development programs. However, it is only in the past two decades that serious attempts have been made to apply cost effectiveness techniques consistently to social programs, (eq. schools and prison rehabilitation programs). This adjustment has been difficult, particularly in non-standardized program areas which rely on local community or group initiatives. So if the following observations seem discouraging, they are simply a comment on the state of the art of cost benefit techniques and the difficulty (but not impossibility) of their application in the area of PLEI. If these difficulties are fully appreciated, PLEI groups are likely to make better (or at least more appropriate) use of the techniques.

Table 5 outlines some of the requirements for determining costs and benefits generally, and what the situation is in the PLEI field in terms of fulfilling these requirements. Although all of the points are important, the difficulty in expressing benefits of PLEI in monetary terms (requirement #4) makes cost benefit analysis virtually impossible. Cost benefit analysis measures the economic efficiency of a program in terms of a ratio of costs to benefits. The unit of measurement therefore has to be comparable, and is usually monetary (e.g. dollars). Some of the benefits of PLEI can be identified and measured in dollars, but certainly not all of them, nor even necessarily the main ones. Some PLEI practitioners feel that PLEI is a preventive activity, eg. if citizens know the law, unnecessary court entanglements or use of legal aid may be prevented. But PLEI is just as likely to propel citizens into court with new found knowledge and conviction that they can win a case. Long term PLEI practitioners are likely to recognize that the benefits of PLEI have as much to do with quality of life, the right to know and an over-arching sense of democracy, as it has to do with actual prevention. Although these objectives are admirable and important, they are very difficult to pin a price tag on.

TABLE 5: REQUIREMENTS FOR DETERMINING COSTS AND BENEFITS	
Requirements for Cost Benefit Analysis*	The Situation in PLEI
1. Program must have independent or separate funding.	1. Often overall funding is from several sources and internal programs cannot be separated from each other financially in a "clean" way.
2. Program should be beyond the development stage so that it can be certain that net effects are significant.	2. Many PLEI programs are in their infancy. Little work as been done to determine intended effects and un-intended (spin-off) effects of program. At the community level, it is virtually impossible to attribute an effect solely to a PLEI program.
3. Program impact and the extent of the impact can be validly estimated.	3. A special problem for PLEI groups. Impact measures are seldom taken. Many are not useful for cost-benefit analyses.
4. Benefits can be reduced to monetary terms.	4. Even more of a problem. Only a few of the benefits can be expressed monetarily. Those which can are not consistent from project to project.
5. Decision makers are considering alternative programs, rather than simply whether or not to continue the existing project.	5. Often there is no alternative program that can be adequately defined in cost benefit terms.

*These requirements are from Peter H. Rossi and Howard E. Freeman, Evaluation: A Systematic Approach (2nd Edition), Beverly Hills: Sage Publications, 1982, 289-291. They refer to cost benefit analyses done after the effects of a program are known. If one is doing a cost benefit analysis as part of program planning, requirement #2 is less essential, but is still problematic.

Table 6 outlines some of the theoretical costs and benefits of a PLEI program on landlord and tenant law. It deals only with costs and benefits to tenants (not landlords), and to government. Costs and benefits could also be described in terms of the program itself and in terms of the community. This one example shows how many of the core benefits are non-monetary, and how costs to government are as likely to increase as they are to decrease.

Given this difficulty with putting a monetary value on benefits, it is unlikely that cost-benefit analysis will occupy a central place in overall PLEI program evaluation. It can, of course, be useful in analyzing administrative decisions such as whether to purchase a computer, the costs and benefits of which are readily expressed monetarily. In terms of program evaluation, the most useful approach to cost benefit analysis at present would be for PLEI programs to do in-depth follow-up studies of individuals who have attended programs (see "Case Studies" in Module V). As part of such studies, the evaluator could do an assessment of all costs and benefits to the individual, especially monetary ones. This approach could ultimately lead to an understanding of situations in which PLEI groups could reliably predict monetary benefits of their programs. (For example, right now we could fairly readily say that PLEI workshops on unemployment insurance appeals will more likely produce measurable monetary benefits to the individuals than will workshops on the Charter of Rights. It would be nice to be able to say that on average, half the participants at unemployment insurance workshops attend with the expectation of realizing some form of monetary benefit, and that on average half of that group in fact do receive benefits to which they are entitled.)

TABLE 6: SOME THEORETICAL COSTS AND BENEFITS OF A PLEI WORKSHOP SERIES ON LANDLORD AND TENANT LAW

<u>Possible Benefits to Individual Tenants</u>	<u>Possible Costs to Individual Tenants</u>
1. Decrease in anxiety because of known rights 2. Increase in peace and enjoyment of premises 3. Increase in housing security² 4. Decrease in rent¹ 5. Return of security deposit¹	1. Increase in anxiety because of known rights 2. Increase in anxiety because of decision to go before tribunal or court 3. Loss of earnings to appear before tribunal¹ 4. Cost of court/tribunal appearance¹ 5. Cost of PLEI Workshop¹ (if any)
<u>Possible Benefits to Government</u>	<u>Possible Costs to Government</u>
1. Decrease in tribunal or Court costs³ 2. Decrease in landlord and tenant problems requiring additional services³, eq. police, mental health	1. Cost of PLEI program¹ 2. Increase in tribunal or Court costs
<u>Note:</u> ¹indicates measurable in monetary terms ²indicates possibly measurable in the form of moving expenses and/or increased rent charges which are not incurred. ³indicates measurable effects, but they are virtually impossible to attribute to PLEI programs.	

Types of questions which could be asked individuals in case studies are shown in Table 7.

TABLE 7: TYPES OF COST BENEFIT QUESTIONS WHICH COULD BE ASKED INDIVIDUALS IN CASE STUDIES

(Note: Questions would be exploratory and would become more specific as you learned about the participant's original expectations, what action they took, and what the results were. These questions might be asked of somebody who attended a landlord-tenant lecture series. You would start off by explaining why you are asking for this information.)

1. Did you incur any costs in attending this lecture series?
eq. Time off work
Babysitting
Program material
Gas
2. When you came to the lecture series, did you have a problem that you hoped the lectures would solve?
- Explain

(From this point on, adapt questions to responses given)

3. Did the problem involve potential savings?
eq. Lowering of rent increase?
Return of security deposit?
Reimbursement for repairs?
Continuation of tenancy (ie. no move required)?
4. Did the respondent act on information?
5. What costs were incurred in acting on the information?
eq. Court appearance?
Lawyer?
Time off work?
Negative verdict?
6. What were the benefits?
eq. See 3 above
7. Produce total of costs and benefits

Unlike cost benefit analysis, cost-effectiveness analysis is a method of analyzing program effectiveness which does not require that benefits be expressed monetarily. Instead, the evaluator looks at alternatives which have the same outcome and compares them from a cost standpoint.

But cost-effectiveness studies are also problematic in the PLEI field. Consider, for example, the difficulty of finding measurable outcomes which are readily comparable from program to program or between PLEI group and PLEI groups. By looking at other fields where outcomes are readily comparable, we can see the extent of the problem in the PLEI field. In education, a common outcome measure is scores on standard tests. Thus, two reading instruction programs can be costed and compared in terms of how well students do on a standardized reading exam, or the programs can be compared in terms of their drop-out rates. For prison programs, a common outcome measure is recidivism. In the area of PLEI there is no common standard that would have the same degree of consensus among practitioners as occurs in these other fields.

A three-pronged approach to this problem is suggested. First, PLEI groups can define within their own operations different programs or program options which have common measurable objectives, eg. the delivery of a certain body of substantive or procedural law. Second, in some cases it may be appropriate to develop some standardized test of legal knowledge or attitudes (eg. with class-based PLEI programs, or with training programs). There are many well-founded objections to testing, and many PLEI groups may choose not to pursue this avenue. A third approach is for PLEI groups to spend some time at future regional or national gatherings trying to establish common definitions of some PLEI objectives which are amenable to measurement. The purpose of such agreement would not be to straight-jacket groups into having common goals, but rather to develop the possibility of comparing costs around some common outcomes.* All of these are long term objectives, but they may help lay the basis for more "effective" cost-effectiveness studies.

3.8.3 Costing programs

We have described some of the difficulties in putting a value to program benefits. This concern often overshadows the need for adequate descriptions of program costs. Frequently the cost of a program is considered simply as the "amount of the government grant", or the "budget". These definitions often overlook other sources of income to cover costs, the donation of facilities, meeting or other space, and especially for PLEI programs, the donation of volunteer time.

The purpose of listing all the "ingredients" of a program's costs is not only to give as complete a picture as possible, but also to allow for comparability between programs. For example, suppose Community A has an active contingent of lawyers who donate their time to PLEI workshops in the community and the workshop budget is only \$500.00/year. If the cost analysis of this program fails to reveal the hidden costs of this volunteer time, it is of little use to people elsewhere who might be planning workshops in their community. A similar program in Community B without volunteer resources might require \$3,000.00 to achieve the same results by paying outside speakers to come into the community.

Another reason for costing volunteer time and donated facilities is to reveal to funders the various sources of support a program receives. If a funding agency realizes that it is not the only one

*A document which could be considered a first step in this direction was written by Lois Gander of the Legal Resource Centre in Edmonton, entitled, "Towards a Taxonomy of Public Legal Education: A Report to the Department of Justice of the Government of Canada."

TABLE 8: HYPOTHETICAL EXAMPLE OF A COST ANALYSIS OF A PLEI PROGRAM IN A MULTI-USE COMMUNITY CENTRE				
Item	Total Costs	Dept of Justice	Foundation	Community Costs
<u>Personnel (Salaries/Benefits)</u>				
Executive Director (1/3 of \$30,000.00)	\$10,000		\$10,000	
PLEI Worker	\$25,000	\$25,000		
Janitor (1/2 of \$4,600)	\$ 2,300		\$ 2,300	
Value of Volunteer Time				
200 hrs @ \$30.00	\$ 6,000			\$ 6,000
100 hrs @ \$4.00	\$ 400			\$ 400
Bookkeeping/Audit	\$ 1,500		\$ 1,500	
<u>Facilities</u>				
Office Lease	\$ 3,600	\$ 3,600		
Value of donated Work space	\$10,000			\$10,000
<u>Equipment & Materials</u>				
Office Equipment Lease	\$ 3,000		\$ 3,000	
Office Materials & Supplies	\$ 4,000	\$ 4,000		
PLEI Materials	<u>\$ 4,800</u>	<u>\$ 4,800</u>		
	\$70,600	\$37,400	\$16,800	\$16,400

*Note: In this example, only a third of the executive director's time is devoted to the PLEI program. There are two types of volunteers -- lawyers and high school students. Lawyers' time is valued at a lawyer's rate for legal tasks; student's time is valued at minimum wage. Workshop facilities are donated by the local school board and valued at their normal rental costs.

"carrying the buck", it may feel the value of its contribution is being multiplied by the efforts of others. The agency may also be reluctant to face the accusation that if it withdraws funding, the program may in fact lose an equal amount of value in community volunteer time.

Table 8 provides a hypothetical example of a simple cost analysis of a PLEI program. It reveals at a glance that the amount of the main funding contribution is slightly over half the overall costed amount of the project, and that donations of time or manpower account for approximately one quarter of the total cost contribution. A more detailed version of this framework, with explanatory notes on how items are calculated, would provide an adequate basis for comparing programs.

These calculations raise some difficult problems involved in assessing costs. One is how you value facilities which are owned by the PLEI group (an unlikely situation) or an umbrella agency (a more likely situation). Since there is no monthly or annual rental involved, you need either to obtain an estimate of the cost of leasing a similar space or to calculate an annual cost by taking into account the depreciation of the existing structure and the interest on the undepreciated value. Although this sounds like a horrendous procedure, this type of information could likely be obtained with some help from a local realtor. Calculation of equipment which is owned must similarly take into account depreciation and life-span.

A second problem is how to cost volunteer time. Basically, you must know the qualifications of the volunteers and what those qualifications would allow him or her to earn on the open market. If the volunteer is doing tasks which require their actual qualifications (eg. a lawyer giving a lecture on law), then you use the appropriate rate and multiply it by the number of volunteer hours. If the volunteer is not doing a volunteer task which requires his/her full qualifications, then you assess the skills required of the task itself. For routine work, this is often the minimum wage.

3.8.4 Assessing benefits, effectiveness and utility

There are three approaches to assessing the benefits of programs. Briefly, they are:

Cost benefit analysis - this approach determines all program costs and all benefits, both of which are expressed in monetary terms. Benefits are then divided by costs to produce a benefit-to-cost ratio.

Cost effectiveness analysis - this approach examines the benefits of a program in terms of program outcomes. Only programs with similar goals can be compared, and a common measure of effectiveness must be used to assess them. The cost per program unit (eg. per participant) is divided by the effectiveness measure (eg. a test score or satisfaction score) to produce a cost effectiveness index (see example, Table 9).

Cost utility analysis - this method puts subjective values (ie. "utilities") on each of several alternatives in terms of various objectives. The objectives may or may not have different weights attached to them. The cost of each alternative is divided by the total or weighted utility scores to produce a cost utility ratio (see Table 10).

TABLE 9: HYPOTHETICAL RESULTS OF A COST-EFFECTIVENESS STUDY RELATING DELIVERY METHODS TO TRAINEE SATISFACTION AT PLEI TRAINING WORKSHOPS*			
Delivery Method	Cost per Participant	Effectiveness (satisfaction test Score)	Cost/effectiveness Index (Divide cost by effectiveness)
Video & Discussion	\$18.00	20	.9
Lecture & Discussion	\$ 4.00	5	.8
Role Play & Discussion	\$ 8.00	15	.5

*Adapted from a framework in Levin, 1983: 20. In this example, the role play & discussion is the most cost effective of the three alternatives.

We have discussed some of the problems and possible solutions to the first two approaches in Section 3.8.2. The cost-utility approach may be of use to PLEI groups, because of its flexibility. It allows for subjective judgements, and can therefore be a relatively quick planning tool.

In the example of cost utility analysis in Table 10, the problem is to determine the most cost effective alternative of four PLEI delivery methods. Effectiveness can be related to several possible impacts for each delivery method. Five such "impact dimensions" are identified. Since the dimensions are not necessarily of equal value, a panel (eg. of PLEI workers, potential participants, etc) is formed to give weights to each of the dimensions. These weights are shown at the bottom of each column. The same (or a different) panel is then asked to assess a "score" to each of the delivery methods in terms of each of the dimensions. The scores are weighted and totalled. The estimated costs are divided by the weighted scores, producing a cost utility ratio.

Clearly the weighting of impact dimensions is a subjective process. The decisions about which dimensions to include at all are equally subjective. If other dimensions and other weightings were established, the utility ratios might be quite different.

The same applies to the "cost per user or viewer" figures. For example, video programs on cable television don't have audience ratings, so estimates of cost per user are difficult to assess. Similarly, it is hard to obtain accurate figures on newspaper distribution in many communities, especially in the North or suburban communities where metropolitan dailies sometimes obscure readership totals. Although publication and distribution counts of written materials such as booklets are easy to obtain, each booklet may be read by more than one person. This is especially true if libraries are sent copies.

TABLE 10										
UTILITY RATINGS AND COST UTILITY RATIOS OF DELIVERY ALTERNATIVES FOR PLEI UNITS ON LANDLORD/TENANT LAW ¹										
Alternative	Cost per user or viewer	Impact Dimension ²					Utility Scores		CU Ratios	
		D/A	U	Loc Int	Rel	Rep	Total Score ³	Average Weighted Score ⁴	Total Score ⁵	Weighted Score ⁶
1. Local Workshops	2.10	8	9	9	6	0	32	58	.066	.036
2. Video Production for local Cable TV	7.00	8	9	2	2	10	31	49	.226	.143
3. Booklet	2.00	7	7	2	9	8	33	52.6	.061	.038
4. Article series for local newspapers	.30	4	7	2	5	8	26	40.8	.012	.007
Utility Weights for each impact dimension		10	9	9	8	5				

¹The framework for this table is adapted from Henry M. Levin, Cost-Effectiveness: A Primer, Beverly Hills, Sage Publications, 1983, p. 124. The example is hypothetical.

²Impact Dimensions: D/A = Distribution/Accessibility; U = Understandability; Loc Int = Local Interest; Rel = Reliability as source of recall for later information; rep = replicability in other locations.

³For total score, sum the scores on each of the impact dimensions

⁴For average weighted scores, multiply each impact dimension score by the utility weight for that dimension, sum these five products, and then divide by five to get the average.

⁵For CU total score, divide cost per user by total score.

⁶For CU weighted score, divide cost per user by Average Weighted Score. In this example, a newspaper article series has the lowest cost utility ratio, and would be seen as most cost effective.

3.8.5 Costs and benefits for whom?

It should be established at the outset which body or group is the subject of cost effectiveness studies. As shown in Tables 6 and 7, cost and effectiveness analyses can focus on individuals, the PLEI group, a level of government or the community in general. In section 3.8.2 we suggested that cost benefit studies at present would be more fruitful if they evaluated the costs and benefits for individuals. Case studies of individuals could be presented in terms of individual "cost-benefit profiles" or "cost scenarios."

These cost scenarios might describe various situations which did or could have happened to an individual. The first might be what actually happened in terms of costs and benefits after the individual came to the PLEI workshop. The second would describe costs and benefits had the participant not obtained information from any source. The third would describe what might have happened had the individual gone to a lawyer. Although the second and third would be hypothetical cases, they would be developed as a result of interviews with the individual.

Our cost example (Table 8) outlined costs from all sources. Our discussion of cost effectiveness and cost utility focussed primarily on benefits to the PLEI group. Benefits to the community are often intangible when compared, for example, to the impact of a dam or transportation system.

3.8.6 Assessing the appropriateness of using cost effectiveness analysis

The attempt to be "scientific" about assessing the effectiveness of programs from a cost perspective can be frustrating, especially when groups face some of the more subjective areas discussed in section 3.8.4. However, it is best to face these subjective factors squarely rather than pretend they don't exist. In addition, don't assume that cost effectiveness evaluations are necessary or even useful in all situations. These are some situations when they are not appropriate:

When the data is not available.

- When the alternatives are not feasible.
- When you have the capacity to undertake all the alternatives at the same time, and don't need to make a choice.
- When the overall cost of any of the alternatives is not excessive (then you can worry about effectiveness without worrying whether your choice is cost effective).
- When the cost of a cost effectiveness analysis will exceed the gains of the most effective alternative!

3.8.7 The treatment of time in assessing costs and benefits

Often benefits are felt over time rather than all at once. While this is a more important issue in evaluation of programs such as vocational rehabilitation, where the increased lifetime earnings of a trainee might be considerable, some spinoff effects of a PLEI program may accrue benefits to an individual over a lengthy period. A tenant may save much over a multi-year period; a small business person may incorporate a company and gain tax advantages; an individual may have long term savings after attending workshops on debt and money management. Similarly, costs of property or office equipment for a PLEI group may be incurred over a long period of time.

In these types of situations, costs and benefits must be assessed in terms of the same time period. To do this, they are always adjusted to their present values. This technique is called "discounting". You can invest or deposit money received today, and it will accrue interest. Hence your \$1,000.00 today may be worth \$1,600.00 at 10% interest compounded annually. Discounting simply reverses the process, so we can talk about costs and benefits of tomorrow in today's dollars.

The formula for discounting is:

$$\text{present value (p.v.) of an amount} = \frac{\text{amount or cost}}{(1 + r)^t}$$

where r is the discount rate and " t " stands for the number of years (the discount rate requires more analysis, but is commonly 10%).

This \$1,000 expenditure in 5 years is worth \$620.92 today:

$$\text{p.v.} = \frac{1000}{(1 + .10)^5} = \$620.92$$

MODULE IV

GATHERING THE DATA

MODULE IV
GATHERING THE DATA
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MODULE IV: GATHERING DATA

1.0 INTRODUCTION: ISSUES IN DATA COLLECTION

This module describes how to gather data for an evaluation of PLEI activities. Data, as used here, simply means information, and includes, for example:

- numbers (of participants, phone calls, workshops, pamphlets, staff, puppet shows, dollars).
- opinions (on needs, satisfaction, readability, understanding of legal concepts; of staff, participants, trainees, other professionals, the general public).
- Decisions, actions, events (in the lifetime of a program).

These types of data can be obtained for any PLEI program, but with varying degrees of difficulty. What data you consider important and/or choose to collect depends upon a number of issues which are discussed below. Subsequent sections deal with methods of collection.

1.1 Is there a "best way" to collect data?

No single type of data is automatically superior or more desirable than another. Similarly, there is no single "best way" to collect data. The appropriateness of your data collection methods depends on such factors as:

- The type of PLEI program or activities involved:
(e.g. mass produced booklet, public workshops, telephone line).
- The "target group" (type of clientele) you are trying to reach:
(e.g. seniors, children, farmworkers, general public).

- The purpose for which you are collecting data:
(e.g. To assess satisfaction; to determine unmet needs; to understand the personal impacts of PLEI; to assess staff or volunteer performance).
- The resources and time available for data collection:
(e.g. external paid evaluator, committee of the board, staff, summer students, computer availability).

Wherever possible, you should consider more than one method of data collection as a means to answering your questions. For example, a well documented history of a puppetry program (using program records, field notes of puppeteers, and interviews with selected individuals) could complement a survey of students and teachers (to determine the extent of legal knowledge acquired). Both methods could give you information about the value of a program, and each would tap data not available through the other method.

1.2 How does the type of PLEI program affect data collection?

Historically evaluation techniques have developed in relation to particular disciplines (e.g. agriculture, medicine, education). The characteristics of these disciplines have made certain methods of data collection and measurement more logical than others in terms of evaluation. But these methods are not necessarily appropriate to PLEI programs. Table 1 identifies certain characteristics of PLEI programs, compares them with characteristics of other disciplines, and shows how these differences have important implications for data collection in PLEI.

In general, data collection for PLEI is not as clear-cut or easily quantifiable as in many education or medical program evaluations. One has to be flexible, willing to work with limited data bases, and to work hard to develop a variety of useful descriptive measures of a PLEI program.

TABLE 1: CHARACTERISTICS OF PLEI PROGRAMS WHICH AFFECT DATA COLLECTION

PLEI Programs usually have the following characteristics:	PLEI Programs can be contrasted with these types of programs:	The implications for Data collection in PLEI programs are as follows:
They are diverse and non-standardized.	● legal aid ● other single-purpose government programs (e.g. pension) [These programs have <u>specific criteria for entitlement to a service.</u>]	A variety of methods are required (quantitative and qualitative). There is difficulty in developing or using a comparative data base. There is difficulty in defining the degree of utilization of service because there is no clear indication of who has been excluded from a program. Exact descriptions of programs are important (for comparative purposes), hence descriptive data should be collected.
They have few "captive" audiences and frequently have no enrolment (or just voluntary enrolment).	● school education programs ● prison treatment programs ● medical treatment programs ● agricultural testing [These programs have <u>definable, easily reached and tested populations</u>]	Experimental designs (with control groups) are difficult. Achievement tests are difficult (except in school programs). One has to work with a limited data base, and develop systematic or innovative ways of contacting users.
They have "soft" benefits or objectives.	● economic programs ● medical programs ● legal aid [Each has a <u>"hard" product which can be measured</u>: eg. \$\$, units of production, lower incidence of disease, number of cases represented in courts]	Studies on effectiveness or benefits of programs usually involve some subjective measurements and qualitative data collection.
They are generally not developmental.	● community development programs ● school-based educational programs ● counselling programs [Each of these programs sticks with a client or group of clients over an extended period of time.]	There is a difficulty in measuring before and after circumstances or knowledge of clients. Long term case studies are less feasible. Effects of programs are often intangible. Opinions of program may be less defined. Eclectic data collection is required to support claims of impact or changes.

Table 2 suggests data collection techniques which may be appropriate for various categories of PLEI program and types of evaluation. These techniques are discussed in this module. The evaluation types are described at length in Module III. The table is not intended to be exhaustive, but to suggest a range of possible techniques.

1.3 How does your program target group affect data collection?

The nature of the target group the PLEI group serves can affect how you collect data. For example, if the group is illiterate, not literate in English, or of low education, mail questionnaires or questionnaires enclosed with written material are usually inappropriate. Structured or formal data collection methods may be alienating to some low income groups. Children may be more responsive to the use of art in evaluation.

Table 3 is a general guide to some techniques suitable for particular target groups. The techniques are discussed in this module. The evaluation types are described in Module III.

1.4 Relating data collection to your evaluation purposes

Data collection methods should be tailored to the purpose of the evaluation. The most common purposes (which frequently overlap) are listed below. These purposes may be defined by several groups (e.g. staff, board, funder, executive director or other agency in the field). The development of appropriate data collecting methods is essential if the purposes and concerns of the group are to be adequately addressed.

Monitoring: This is a way of listening to the pulse of your programs, in good times and in bad. It usually requires the establishment of forms, checklists, logs, short handout questionnaires or other ongoing recording devices. The type of information you collect will depend on what you think are the important indicators of your program's health. The resulting data may be for board meetings, staff reviews, funding proposals or annual reports.

TABLE 2: DATA GATHERING TECHNIQUES FOR EVALUATION TYPES AND SERVICE DELIVERY CATEGORIES*

EVALUATION TYPE	SERVICE DELIVERY CATEGORIES						
	LECTURE OR WORKSHOP	WRITTEN MATERIALS	DRAMA/PUPPETRY	AUDIO VISUAL	COMMUNITY DEVELOPMENT	PHONE-IN SERVICE	MULTIPLE (Total Program)
NEEDS ASSESSMENT	Community Forum Social Indicators Key Informant Survey Nominal Group Program Stats	Key Informant Social Indicators Program Stats	Key Informant Social indicators Program Stats	Key Informant Social indicators Survey Program Stats	Community Forum Key Informant Social Indicators Survey Nominal Group Program Stats	Key Informant Nominal Group Social Indicators Surveys Program Stats	Social Indicators Community Forum Key Informants Surveys Nominal Group Program Stats Delphi
PROGRAM UTILIZATION	Program Stats Document Analysis Surveys Photography	Program Stats Observation Surveys Document Analysis	Surveys Diaries Photography Program Stats	Program Stats Surveys	Program Stats Document Analysis Observation Photography Diaries	Survey Program Stats	Survey Program Stats Observation Photography Document Analysis
ORGANIZATIONAL ASSESSMENT	Document Analysis Key Informant Program Stats Survey Observation Photography Investigative Journalism	Key Informant Document Analysis Observation	Observation Document Analysis Photography Key Informant	Document Analysis Key Informant Observation	Document Analysis Key Informant Photography Investigative Journalism	Key Informant Document Analysis Program Stats Observation	Document Analysis Program Stats Key Informant Photography Investigative Journalism Observation Survey Mapping
MATERIALS ASSESSMENT	Key Informant Survey Program Stats Nominal Group	Key Informant Survey Program Stats Nominal Group	Key Informant Survey Program Stats Nominal Group Photography Observation	Key Informant Survey Program Stats Nominal Group Observation	Key Informant Survey (interview) Program Stats Nominal Group Photography Observation	Key Informant Survey Program Stats Nominal Group	Key Informant Survey Program Stats Nominal Group Photography
IMPACT ASSESSMENT	Survey Program Stats Case Study Delphi Creative Expression Observation Tests	Survey Program Stats Case Study Tests	Survey (Interview) Program Stats Diary Case study Observation Tests	Survey Program Stats Tests	Survey (Interview) Case Study Problem Stories Photography Program Stats Creative Expression Observation Diaries	Survey Program Stats	Survey Case Studies Delphi Program Stats Observation Creative Expression Problem Stories Diaries
COST EFFECTIVENESS STUDY	Document Analysis Program Stats Key Informant	Document Analysis Program Stats Key Informant	Document Analysis Program Stats Key Informant	Document Analysis Program Stats Key Informant	Document Analysis Program Stats Nominal Group Key Informant	Document Analysis Program Stats Key Informant	Document Analysis Program Stats Key Informant Nominal Group

*All Techniques listed are discussed in this module, except for case studies (Module V) and tests (Module III under Impact Assessment, and Module V under Inferential Statistics)

TABLE 3: DATA GATHERING TECHNIQUES* FOR EVALUATION TYPES AND TARGET GROUPS				
Evaluation Type	General or Multiple	Ethnic minority	Children	Low income
Needs Assessment	Community Forum Social Indicators Key Informants Nominal Group Surveys Program Stats	Community Forum Social Indicators Key Informants Nominal Group Surveys Program Stats	Key Informants Community Forum Nominal Group Creative Expression	Community Forum Nominal Group Key Informant Social Indicators Creative Expression
Program Utilization	Document Analysis Observation Surveys Program Stats Photography	Document Analysis Observation Surveys (face to face) Program stats Photography	Observation Program Stats Diaries Photography	Program Stats Observation Photography Surveys (tel. or face)
Organizational Assessment	Document Analysis Key Informant Observation Program Stats Surveys Photography Investigative Journalism Mapping	Document Analysis Key Informant Observation Program Stats Surveys (face to face) Photography Mapping	Document Analysis Key Informant Observation Program Stats Surveys Photography	Document Analysis Key Informant Observation Program Stats Surveys (tel. or face) Photography Investigative Journalism Mapping
Materials Assessment	Key Informant Nominal Group Program Stats Survey	Key Informant Nominal Group Program Stats Survey	Key Informant Nominal Group Program Stats Survey Observation	Key Informant Nominal Group Program Stats Survey Observation
Impact Assessment	Survey Key Informant Program Stats Case Study Delphi Observation Problem Stories Creative Expression Diaries Tests	Surveys (face to face) Key Informant Program Stats Case Study Creative Expression Problem Stories Observation	Surveys (face to face) Key Informant Program Stats Case Study Creative Expression Problem Stories Observation Tests	Survey (face to face) Key Informant Program Stats Case Study Creative Expression Problem Stories Observation
Cost Effectiveness Study	Document Analysis Program Stats Nominal Group Key Informant	Document Analysis Program Stats Nominal Group Key Informant	Document Analysis Program Stats Nominal Group Key Informant	Document Analysis Program Stats Nominal Group Key Informant

*All techniques listed are discussed in this module, except for case studies (Module V) and Tests (Module III, under Impact Assessment, and Module V, under Inferential Statistics).

Justifying: You may need to make a strong case to your board or a funder for the establishment or continuation of a particular program. In justifying the need for a program you will likely use some monitoring data, but will go beyond the particular program to look at the community context and costs in relation to other programs. Data collection may require interviews or surveys of the community, looking at social indicators (government or private reports on the makeup of your community) and examining financial records concerning costs of your program.

Problem solving: Evaluation can be used to focus on particular problems. Perhaps attendance is falling dramatically at your workshops. You may have to develop more in depth interviews with people attending particular workshops, rather than use your monitoring handout questionnaires.

A staff member may be burned out. Data collection may involve discussions or interviews with the individual, other staff members, volunteers and board members (either individually or as a group). It may also involve a limited program review (to reduce program objectives), examination of retraining possibilities (to enhance skills), exploration of increased volunteer potential (to distribute workload), or contact with other PLEI groups (to explore other ways of delivering the same service).

Reviewing/planning/priority setting: General planning will usually require monitoring data. Depending on circumstances, it may require data derived from needs assessment, similar to that described under "justifying." Planning may also involve staff and outsider data (opinion) collection through brainstorming or more structured opinion collecting methods such as nominal group or delphi procedures.

Demonstrating: If your group receives funding for a project which demonstrates new PLEI delivery techniques, you may be required to document

the program throughly so that other groups understand its activities and context. For example, a PLEI drama group may be required to record the history of the project, describe the particular context (setting, audience, communities) and document its impact. Historical information may be gathered through group and individual interviews, the use of participant logs and photography. The impact of the project could be assessed by means of individual and group interviews, and possibly testing for acquisition of legal knowledge if school children are involved.

1.5 Who should collect the data?

If you have hired an external evaluator, that person will either collect data him/herself, or arrange for interviewers if survey or field-work is necessary. If your organization is undertaking its own evaluation, three considerations should be borne in mind when determining appropriate persons to collect the data.

Objectivity: It is not unusual to see a lecturer or program coordinator handing out a questionnaire after a workshop to collect feedback on the workshop format and content. Unfortunately, this approach seldom results in comments critical about the program. It also frequently leads program staff to the conclusion that there is little need for change, and that evaluation is a useless exercise.

Data collected in this way are often seen as self-serving, even when critical feedback really is wanted. The problem is that this approach lacks an obvious concern for objectivity. Like justice, objectivity must not only be "done", but must be SEEN to be done. Whenever possible, you should try to have somebody OTHER than program people collect feedback data, e.g. a subcommittee of your board in charge of the evaluation. That subcommittee may decide to undertake the work itself, or to use volunteers, summer students, or somebody from another agency.

If somebody other than the workshop lecturer collects evaluative feedback, the participants are more likely to believe that the process is serious, and that candid feedback is expected. In mail surveys it is helpful to leave a return address which is different from that of the PLEI organization (or at least a different contact person within the organization) than the person who delivered the program.

Sensitivity: Some audiences (e.g. seniors) have been found to be happy to have ANY PLEI program and are reluctant to offer criticism. Sometimes ethnic groups offer few criticisms because of cultural patterns or language barriers. PLEI programs which are oriented towards community development (as with some native or low income groups) often involve a delicate relationship of trust between the group and PLEI worker.

In any situation where an evaluator has direct contact with the respondent (the person being interviewed), it is important that he/she be sensitive to these types of concerns. Especially where there is a strong bond between the group and the PLEI worker, the latter may need to inform the group that s/he really DOES want critical feedback, and that they should cooperate with the evaluator. The evaluator should ideally be skilled in more relaxed, discursive ways of collecting feedback rather than in reeling off a list of questions.

Knowledge of program and interviewing skill: A knowledge of the PLEI program is essential for the development of effective questionnaires and for face-to-face or telephone interviews. Especially if the questions are open-ended (i.e. without a specific choice of answers), the interviewer will need skills to clarify answers, to provide more background to the question or to draw examples and explanations from the respondent.

1.6 How do personnel resources affect data collection?

Gee, I'd like to get a better handle on the background of some of these people.

You know, we really have to ask more than just satisfaction questions. I really want to know why people come and what they do with the information. I mean, do they act on it? Do they feel better about themselves? Can they....

Don't be over ambitious if you don't have a lot of resources. In an effort to be "serious" about evaluation, groups will sometimes plan extensive surveys and/or long questionnaires. If the crunch does not come when you are collecting the data, it will when you try to analyze it and present it in a way that will be used.

You can avoid the problem of over-ambitiousness by carefully assessing the quantity and quality of your manpower. You can tailor your data collection in terms of your manpower QUANTITY by such methods as:

- prioritizing those issues that you really want evaluated, and eliminating some evaluative components if necessary.
- using mail-out questionnaires (if appropriate) or telephone surveys rather than personal interviews.
- using a smaller sample than you might normally want.
- reducing the number of questions in a questionnaire.
- using close-ended questions (which require less data analysis) in questionnaires.

Similarly, if your only available manpower lacks the necessary sensitivity, program knowledge or interviewing skills you may wish to:

- provide them with more adequate training or program orientation.
- use primarily close-ended questions (which require less skill).
- use mail-out questionnaires (if otherwise appropriate).

If you are planning a large scale evaluation which will generate a lot of quantitative data, you need to be sure you have access to computer facilities and skilled personnel for programming, data entry and data analysis. The decision to use computer facilities is based not so much on the number of questionnaires as on the type of questions and the analysis you require of the data. For example, it is not difficult to record data manually for 100-200 questionnaires if there are only about ten questions, they are all close-ended, and you are primarily doing tallies or simple categorizations of each answer. However, if you have a lot of questions on each questionnaire and you wish to analyze how people answered depending on their income, age, sex or other factor, you will probably require computer assistance. If this assistance is not available, you will have to scale down your questionnaire and your expectations of the type of analysis which will be possible.

1.7 Validity and reliability issues

Two general concepts are important as guidelines to the way you collect data and the type of emphasis you put on the data you collect. The first is reliability. The data you collect should be reliable, consistent and dependable. Here are some ways of increasing reliability:

- don't just report information from one source. Use several sources, a group, or do a survey.
- Make sure that your sources of data are well-informed and can justify what they say.
- Be sure that your data is not affected by particular circumstances (eg. rainy days, winter days and holidays may all affect attendance and bias your data if it is collected at only 1 time; your informant may be

upset, angry or in a hurry when you interview him, and not give the same answers as he would if more relaxed).

- Be sure that your data collection forms are consistent. If you are reviewing data collected over previous years, make sure you know when data collection forms or methods changed, so that you don't think a program change occurred when it was really just a recording system change (eg. repeat calls for information might have been recorded as new calls in 1983-84, but in 1984-85 repeat calls might not be counted at all. You may unreliably report a drop in calls when this wasn't the case).
- If you are using several interviewers or observers, make sure that they report answers or observations in a consistent manner (This is known as "inter-rater reliability", ie. the persons "rating" answers do so in the same way.) You can test for inter-rater reliability by having your interviewers or observers do the same task with the same person (eg. an interview or observation). Then compare results. Make sure your instructions to interviewers and observers are the same -- write them out.
- If you have developed a test (eg. on knowledge of court procedures) which you intend to use fairly frequently, see if it has "test-retest reliability." This means you administer it to the same group on two different occasions, and correlate the two sets of scores. People who score high on the first occasion should score high on the second if the test is reliable. (See section 5.6 in Module V on correlation of test scores).
- If you have two tests that are supposed to measure the same skill, knowledge or attitude (eg. respect for the law), make sure they can be treated as equivalent. Test them both on the same group on the same day and correlate the scores. If the correlations are high, they can reliably be used as pre and post-test measures.

The second concept is validity. Data is valid if it measures what you think you're measuring. There are several ways you can work towards this objective.

- As you develop your data-gathering instruments, keep checking your evaluation objectives to ensure that your instruments are designed to collect the type of information you intended them to collect. Otherwise you will be reporting findings which are irrelevant to what you claim to be measuring.
- More specifically, check questionnaire wording. If you are collecting data on satisfaction, check that your questions are about satisfaction and not about some other measure such as expectations or usefulness.

Don't assume that data on "usefulness" is a reflection of "satisfaction". (See also Section 2.1.2 in this manual).

- Check tests which you've developed for their "predictive" validity -- eg. you've developed a test which you think will predict which individuals are most likely to take action on PLEI they've received. You administer your test to a sample of PLEI callers and then follow up on their cases after a set period of time to see if they in fact did take action. If their action orientation correlates highly with your predictions, your instrument is considered to have predictive validity.
- Check for "content validity" of any tests -- eg. use a panel of experts to assess whether your "action-orientation" test contains a representative sample of questions that deal with this quality.
- Check for "concurrent validity" of any tests. In this case, you want to see if your test stacks up well against any other validated test which measures the same types of qualities. If the scores on your test and the other test correlate highly, your test is considered to have concurrent validity. (Of course this is difficult to do if you are testing a quality that has not been measured before.)
- Check for "construct validity", which is an attempt to determine if a test adequately measures a particular psychological "construct" or attitude. In this case you can try out your test on people whom experts say are action-oriented. If they have high scores on your test, it is considered to have construct validity.
- In general terms your evaluation instruments should have "face validity" for the people who have requested the data. That is, for them, the data gathering instruments must appear "on the face of it" to be collecting information that will answer their questions. Thus, whomever the main stakeholders in the evaluation are, they should have the opportunity to review any data gathering instrument.

2.0 QUESTIONNAIRES

1. ON A SCALE OF 1 TO 10, HOW WOULD YOU RATE THE EVENT? _____
2. DO YOU THINK THE SESSION WAS
 - _____ (a) EXTREMELY INTERESTING AND INFORMATIVE
 - _____ (b) INTERESTING AND INFORMATIVE
 - _____ (c) INFORMATIVE BUT NOT INTERESTING
 - _____ (d) A WASTE OF EFFORT
3. WHAT IS YOUR UNDERSTANDING OF THE SERVICES PROVIDED BY (the organization)?

Would you find the above questions awkward to interpret? They are drawn from questionnaires of PLEI groups in Canada, and represent common mistakes. We will be discussing examples similar to these in the following sections. At present, questionnaires are the method most frequently used by PLEI groups to gather evaluative data. Their most common purpose has been to obtain "consumer feedback" on lectures, training workshops, legal materials, and performances although they have also been used for needs assessments, testing, and personnel assessments. While some valuable information has been generated for these purposes, much more could be obtained if more attention were paid to the actual construction of questionnaires.

Constructing questionnaires is NOT the same as simply "asking a list of questions." In evaluation jargon, questionnaires are called "instruments", which suggests that (1) they have to be crafted, and (2) they serve a specific purpose. Crafting, or constructing the questionnaire occurs at three levels:

- how WORDS are used
- how QUESTIONS are constructed
- how the overall QUESTIONNAIRE is structured
(i.e. how questions are grouped and placed in sequence).

If your purpose is not carefully considered during construction at each of these levels, you will find that you have gathered data which is less precise than or completely different from what you intended.

The following examples of questionnaire problems are taken from actual PLEI questionnaires. The revisions are intended to show how more careful construction can better meet the objectives of the evaluation.

2.1 Wording

Sometimes poor wording is just a matter of poor grammar (sorry, folks). More often, it represents a failure to clarify what it is you want to know. In either case, it makes for confusing questions and responses which may be meaningless.

2.1.1 Vague or ambiguous wording

In examples 1-5 each of the original questions can be interpreted in at least two ways, as shown in the revisions.

EXAMPLE 1: VAGUE OR AMBIGUOUS WORDING	
ORIGINAL QUESTION	What did you enjoy most about the session? LECTURE _____ FILM _____ DISCUSSION _____
REVISION	In today's session, which of the following provided you with the most useful information (check one)? LECTURE _____ FILM _____ DISCUSSION _____
REVISION	State what information (if any) you found useful in each of the following formats. LECTURE: _____ FILM: _____ DISCUSSION: _____

Example 3 uses the term "your understanding" in a sophisticated way, which might escape many respondents.

EXAMPLE 3: VAGUE OR AMBIGUOUS WORDING	
ORIGINAL	What is your understanding of the services provided by the Public Legal Information Association?
REVISION	Please state what you believe to be the services offered by the Public Legal Information Association.
REVISION	Please indicate how aware you are of the services offered by the Public Legal Information Association?
____ KNOW NOTHING ____ AT ALL ____ NOT VERY ____ AWARE ____ QUITE AWARE ____ VERY AWARE	

Example 4 is too open. It is helpful to give a respondent a framework for answering the question, even when it is open-ended. Without some guide, the question may be overwhelming and be left unanswered. Suggestions on how to approach the question can help to convince the respondent that you really do want feedback.

EXAMPLE 4: VAGUE OR AMBIGUOUS WORDING	
ORIGINAL QUESTION	If you were to change some part of today, what might it be?
REVISION	If you were to change some part of today's session, describe what it would be. (You might wish to suggest dropping one of the presentations or adding a new one; using a different method of presentation -- eg. role play, film, or lecture and discussion; using different or more resource people, etc.).

EXAMPLE 5: VAGUE OR AMBIGUOUS WORDING	
ORIGINAL QUESTION	On a scale of 1 to 10, how would you rate the event? _____
REVISION	Indicate on the following scale how you would rate today's workshop. (Circle the appropriate answer).
	1 2 3 4 5 6 7 8 9 10
	COMPLETELY USELESS EXTREMELY USEFUL

In example 5 the original question fails to mention the terms on which the respondent is supposed to evaluate the workshop (e.g. good/bad, useful/useless). Equally important, it does not explain whether 1 is good and 10 is bad, or vice versa.

2.1.2 Words disguised as other words

Often questionnaires will ask respondents to indicate whether a conference met their EXPECTATIONS, whether a film was INTERESTING, how SATISFIED they were, how USEFUL a presentation was, and so forth. Even though these terms are closely related, they are not interchangeable. A person may have found a lecture interesting, but it might not have been what he was expecting, and he may go home dissatisfied.

The question in Example 6 uses the term "expectations", but is about satisfaction. The responses will therefore indicate very little about expectations. The first revision suggests how the question could be rephrased to address expectations (perhaps to gauge how accurately the program's advertising conveyed the course to the public). The second revision (although very general) deals with satisfaction.

EXAMPLE 6: WORDS DISGUISED AS OTHER WORDS									
ORIGINAL QUESTION	Did the class meet your expectations? _____ (a) IT WAS BETTER THAN I EXPECTED. _____ (b) ABOUT WHAT I EXPECTED. _____ (c) WORSE THAN I EXPECTED. WHY? _____								
REVISION	(To address expectations) Did the lecture deal with topics you had expected to hear about? (Circle the appropriate letter) (a) YES, IT WAS EXACTLY WHAT I EXPECTED. (b) YES AND NO, IT ONLY PARTLY COVERED WHAT I EXPECTED. (c) NO, IT WASN'T WHAT I EXPECTED AT ALL. If (b) or (c), PLEASE INDICATE WHAT YOU HAD EXPECTED TO LEARN ABOUT. _____								
REVISION	(To address satisfaction) Please indicate your overall level of satisfaction with the lecture. (Circle the appropriate answer.) <table> <tr> <td>COMPLETELY</td> <td>QUITE</td> <td>QUITE</td> <td>COMPLETELY</td> </tr> <tr> <td>DISSATISFIED</td> <td>DISSATISFIED</td> <td>SATISFIED</td> <td>SATISFIED</td> </tr> </table> IF "QUITE" OR "COMPLETELY" DISSATISFIED, PLEASE EXPLAIN WHY YOU ARE DISSATISFIED. _____	COMPLETELY	QUITE	QUITE	COMPLETELY	DISSATISFIED	DISSATISFIED	SATISFIED	SATISFIED
COMPLETELY	QUITE	QUITE	COMPLETELY						
DISSATISFIED	DISSATISFIED	SATISFIED	SATISFIED						

Example 7 mixes the term "expectations" in the question with answers about satisfaction. The revision deals only with expectations.

EXAMPLE 7: WORDS DISGUISED AS OTHER WORDS																					
ORIGINAL QUESTION	In relation to my expectations, I feel (circle one): <table> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td colspan="8">DISSATISFIED</td> <td colspan="2">VERY SATISFIED</td> </tr> </table>	1	2	3	4	5	6	7	8	9	10	DISSATISFIED								VERY SATISFIED	
1	2	3	4	5	6	7	8	9	10												
DISSATISFIED								VERY SATISFIED													
REVISIONS	My expectations of the workshop were (circle one): <table> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td colspan="8">NOT MET AT ALL</td> <td colspan="2">COMPLETELY MET</td> </tr> </table>	1	2	3	4	5	6	7	8	9	10	NOT MET AT ALL								COMPLETELY MET	
1	2	3	4	5	6	7	8	9	10												
NOT MET AT ALL								COMPLETELY MET													

Example 8 appears to be a useful question about the opportunity for participation, until one reads the category "too much". This is a clue that the question is likely about "time" (one form of "opportunity for participation"), which can be too long or too short. The first revision deals with the time element. "Opportunity for participation" is inherently positive. In most cases it is unlikely you can have too much of a good thing. However, participation CAN be poorly handled. The second revision is just one example of judging the effectiveness of the participation.

EXAMPLES 8: WORDS DISGUISED AS OTHER WORDS	
ORIGINAL	Was there enough opportunity for participation? ____ TOO MUCH ____ ALL THAT WAS NEEDED ____ SHOULD HAVE BEEN MORE ____ SHOULD HAVE BEEN MUCH MORE
REVISION	How do you feel about the amount of time allowed for questions from participants? Was there ... ____ FAR TOO MUCH TIME ____ TOO MUCH TIME ____ JUST THE RIGHT AMOUNT OF TIME ____ TOO LITTLE TIME ____ FAR TOO LITTLE TIME
REVISION	How do you feel about the way audience participation was handled? Did the workshop leader exercise ... ____ TOO MUCH CONTROL ____ JUST THE RIGHT AMOUNT OF CONTROL ____ TOO LITTLE CONTROL

Prior to constructing a question on satisfaction, expectations, participation or other such broad category, it is helpful to list the possible indicators of the category. For example, indicators for "expectations," "satisfaction" and "usefulness for problem solving" might read as follows:

Expectations:

- actual topics covered
- breadth of material presented (scope of presentation)
- depth of material presented
- types/qualifications/competence of people leading session
- types of people attending
- previous knowledge/experience required of participants
- degree of participation expected

Satisfaction:

- breadth of material presented (scope of presentation)
- depth of material presented
- types/qualifications/competence of people leading session
- manner/style of delivery of information
- opportunity to clarify issues/ask questions/participate
- usefulness of material presented
- pace of the presentation/workshop (too intense, relaxed, etc.)

Usefulness for problem solving:

- enough concrete examples/simulation/role playing
- addressed problems of concern/relevance to participant
- adequate support materials for future self-help
- competence of person leading sessions
- identification of resources

Listing possible criteria in this way will help clarify exactly what issues you are concerned with, how deeply you want to explore them (i.e. how many questions you will ask) and what parts of each issue you

do NOT want to ask about. The lists also show that indicators frequently serve two categories (e.g. "breadth of material covered" can be an indicator for "expectations" and "satisfaction"). This is why groups will often think they are asking a question about expectations, but will emerge with data on satisfaction, or vice versa.

2.1.3 Poor balance

Especially when respondents are given close-ended questions with ordered answers (see also section 2.2), it is important to ensure that the choices are balanced. Otherwise the question will be biased or just plain confusing. Examples 9-11 show three typical mistakes. In Example 9, a bias is introduced because "satisfactorily" should be the mid-point, but that leaves two positive choices and only one negative choice.

EXAMPLE 9: POOR BALANCE	
ORIGINAL QUESTION	How well did the booklet cover the topic? ____ (a) POORLY ____ (b) SATISFACTORILY ____ (c) WELL ____ (d) EXCELLENTLY
REVISION	How well did the booklet cover the topic? ____ (a) VERY POORLY ____ (b) POORLY ____ (c) SATISFACTORILY ____ (d) WELL ____ (e) VERY WELL

Example 10 demonstrates an overeagerness NOT to be biased, but the choices of "decreased awareness" are ridiculous. The revision creates a balance around the choice of "moderately increased."

EXAMPLE 10: POOR BALANCE	
ORIGINAL QUESTION	What effect did the kit have on your awareness of the printed and audio-visual resources which are available for teaching law and law-related education? Was your level of awareness ... ☐ GREATLY INCREASED ☐ SOMEWHAT INCREASED ☐ NOT CHANGED ☐ SOMEWHAT DECREASED ☐ GREATLY DECREASED
REVISION	What effect did the kit have on your awareness of the printed and audio-visual resources which are available for teaching law and law-related education? Was your level of awareness ... ☐ GREATLY INCREASED ☐ MODERATELY INCREASED ☐ NOT INCREASED AT ALL

Example 11 is more subtle. The word "enough" suggests a norm or average, which should be a mid-point. The first revision creates a better balance; the second avoids the term altogether, and seems neater.

EXAMPLE 11: POOR BALANCE	
ORIGINAL QUESTION	Was the topic given ... ☐ (a) ENOUGH TIME ☐ (b) JUST BARELY ENOUGH TIME ☐ (c) NOT ENOUGH TIME
REVISION	Was the amount of time given to the topic ... ☐ (a) MORE THAN ENOUGH ☐ (b) ENOUGH ☐ (c) LESS THAN ENOUGH
REVISION	Was the amount of time spent on the topic ... ☐ (a) TOO MUCH ☐ (b) JUST RIGHT ☐ (c) TOO LITTLE

2.1.4 Mixed criteria

One of the most common mistakes in questionnaires is the use of mixed criteria in the choices offered the respondent. In Example 12 the terms "excellent," "adequate," "poor" and "terrible" are absolute criteria which relate to the respondent's own standards. "Above average" is a normative criterion -- i.e. it suggests the existence of standards other than the respondent's. If these two criteria are mixed, the respondent is not sure which one s/he should be responding to. Nor will the evaluator know which one the respondent had in mind. For example, the workshop could be poor in terms of the respondent's own standards (first revision), but above average in relation to other workshops s/he has been to (second revision). In addition to making

EXAMPLE 12: MIXED CRITERIA	
ORIGINAL QUESTION	Overall, the workshop was _____ (a) EXCELLENT _____ (b) ABOVE AVERAGE _____ (c) ADEQUATE _____ (d) POOR _____ (e) TERRIBLE
REVISION	Take a moment to think about what you hoped to learn in this workshop. Now, how would you rate this workshop in terms of fulfilling those expectations? _____ (a) EXCELLENT _____ (b) GOOD _____ (c) FAIR _____ (d) POOR _____ (e) TERRIBLE
REVISION	Compared to similar workshops you have attended, how would you rate this workshop? _____ (a) FAR ABOVE AVERAGE _____ (b) ABOVE AVERAGE _____ (c) AVERAGE _____ (d) BELOW AVERAGE _____ (e) FAR BELOW AVERAGE

the criteria either all absolute or all normative, the revisions provide clearer reference points for the respondent's choices. If your organization provides a lot of legal lectures and the respondent has been to other lectures, you might ask for his/her assessment of this lecture in relation to other lectures.

Example 13 mixes absolute responses ("yes" and "no") with relative responses ("mostly" and "some"). The revisions make clear that the scale represents a full range of possibilities.

EXAMPLE 13: MIXED CRITERIA	
(This question was a follow-up to a previous question that identified the concern.)	
ORIGINAL QUESTION	Was your concern answered in the workshop? _____ (a) YES _____ (b) MOSTLY _____ (c) SOME _____ (d) NO
REVISION	How well was your concern answered in the workshop? It was answered ... _____ (a) COMPLETELY _____ (b) MOSTLY _____ (c) A BIT _____ (d) NOT AT ALL

Example 14 mixes qualitative criteria ("useful" and "understandable") with a scale criteria ("adequate"). The revision provides three qualitative categories.

EXAMPLE 14: MIXED CRITERIA						
ORIGINAL QUESTION	In filling out the application form, did you find our "Guide to the Application" ...					
	Not much		Somewhat		Very	
USEFUL	1	2	3	4	5	
ADEQUATE	1	2	3	4	5	
UNDERSTANDABLE	1	2	3	4	5	
REVISION	In filling out the application form, did you find our "Guide to the Application" ...					
	Not very		Somewhat		Very	
USEFUL	1	2	3	4	5	
COMPREHENSIVE	1	2	3	4	5	
UNDERSTANDABLE	1	2	3	4	5	

2.1.5 Non-exclusive categories

In example 15, the choices are not mutually exclusive (i.e. the audience could be "apathetic," "bored" AND "confused" at the same time). There is nothing wrong with this, as long as (1) you WANT

EXAMPLE 15: NON-EXCLUSIVE CATEGORIES	
ORIGINAL QUESTION	Did the audience seem ... ___ apathetic ___ bored ___ confused ___ interested
REVISION	Did the audience seem (more than one response possible) ... ___ hostile ___ apathetic ___ bored ___ confused ___ interested ___ excited
REVISION	Did the audience seem ... ___ very bored ___ quite bored ___ quite interested ___ very interested

information that overlaps, and (2) you let the respondent know that the choices intentionally overlap. The first revision provides a larger checklist and allows the respondent to choose more than one answer. The second revision makes it clear that only one answer is wanted along the bored-interested continuum.

Example 16 deals with overlapping criteria by providing a distinct answer for each criterion.

EXAMPLE 16: NON-EXCLUSIVE CATEGORIES	
ORIGINAL	Are you: _____ (a) A TEACHER _____ (b) A STUDENT _____ (c) A LEGAL AID CLIENT _____ (d) SOMEONE WITH A GENERAL INTEREST IN LAW _____ (e) IN NEED OF INFORMATION FOR YOUR JOB _____ (f) SOMEONE WITH A SPECIFIC LEGAL PROBLEM
REVISION	Are you (circle yes or no in each case) ... YES / NO (a) A TEACHER YES / NO (b) A STUDENT YES / NO (c) A LEGAL AID CLIENT YES / NO (d) SOMEONE WITH A GENERAL INTEREST IN LAW YES / NO (e) IN NEED OF THE INFORMATION FOR YOUR JOB YES / NO (f) SOMEONE WITH A SPECIFIC LEGAL PROBLEM

2.1.6 Double-barrelled questions

It's tempting to load questions with lots of adjectives to cover as many angles as you can. Unfortunately, all this does is confuse the respondent. When you analyze the data, you won't be sure of what the answer means.

Example 17 tries to combine the idea of clarity of presentation with usefulness of information. How would the respondent answer if the information was presented clearly but was totally useless? The revision separates the two issues. It also avoids mixing absolute criteria ("yes"/"no") with scaled criteria ("so/so"). (See Examples 12-14 and the related discussion.)

EXAMPLE 17: DOUBLE-BARRELLED QUESTIONS	
ORIGINAL QUESTION	Was the information presented in a clear and useful manner? ____ NO ____ SO/SO ____ YES
REVISION	Was the information presented clearly? ____ NO ____ YES Was the information useful? ____ NO ____ YES

Example 18 combines four categories and asks if they were "well organized." The first revision just asks for an overall assessment. The second revision separates the categories, uses appropriate descriptive words and allows the respondent to assess each category. (Different descriptive words could be used, depending on what was important.)

Example 19 (p. 154) demonstrates the problem of trying to combine two categories ("interesting" and "informative") in one answer. The question also tries to introduce a scale ("extremely interesting" in answer [a] versus "interesting" in answer [b]). Finally, it throws in a third concept ("a waste of effort") which relates inadequately to "informative" or "interesting".

It IS possible to have double-barrelled choices, but you must (1) provide all possible combinations of answers, and (2) drop terms which imply scales (e.g. "extremely," "very," "somewhat"). This option is shown in the first revision. The second revision uses scales, but divides the question into two parts.

EXAMPLE 18: DOUBLE-BARRELLED QUESTIONS

ORIGINAL QUESTION Did you feel that all the elements such as time, place, material and session were organized...

- ☐ (a) VERY WELL
- ☐ (b) WELL
- ☐ (c) ADEQUATELY
- ☐ (d) POORLY
- ☐ (e) BADLY

REVISION Overall, how well would you say the workshop was organized?

- ☐ (a) VERY WELL
- ☐ (b) WELL
- ☐ (c) ADEQUATELY
- ☐ (d) POORLY
- ☐ (e) VERY POORLY

REVISION Please assess each of the following elements of the workshop by circling the appropriate description to the right

TIME	Very inconvenient	quite inconvenient	quite convenient	very convenient
PLACE	very inconvenient	quite inconvenient	quite convenient	very convenient
MATERIALS	very unhelpful	unhelpful	helpful	very helpful
LECTURERS	very poorly presented	poorly presented	well presented	very well presented
DISCUSSIONS	not useful at all	not very useful	quite useful	very useful

EXAMPLE 19: DOUBLE-BARRELLED QUESTIONS	
ORIGINAL QUESTION	Did you think the session was ... ____ (a) EXTREMELY INTERESTING AND INFORMATIVE ____ (b) INTERESTING AND INFORMATIVE ____ (c) INFORMATIVE BUT NOT INTERESTING ____ (d) A WASTE OF EFFORT
REVISION	How would you describe the session? It was ... ____ (a) INTERESTING AND INFORMATIVE ____ (b) INTERESTING BUT NOT INFORMATIVE ____ (c) INFORMATIVE BUT NOT INTERESTING ____ (d) NEITHER INTERESTING NOR INFORMATIVE
REVISION	Did you think the session was ... ____ (a) VERY INTERESTING ____ (b) QUITE INTERESTING ____ (c) QUITE BORING ____ (d) VERY BORING Do you think the information provided in the session was ... ____ (a) EXTREMELY USEFUL ____ (b) QUITE USEFUL ____ (c) NOT VERY USEFUL ____ (d) COMPLETELY USELESS

2.2 Ways of structuring questions

Most of the sample questions in the previous section are "close-ended" questions, that is, possible answers are provided and the respondent circles, ticks, or underlines his/her choice. Questions can also be "open-ended," that is, respondents create their own answers. The purpose of this section is to give examples of both ways of structuring questions and to discuss the advantages and disadvantages of the respective methods.

2.2.1 Open-ended questions

Table 4 gives examples of open-ended questions that have been used by PLEI groups for a variety of purposes.

TABLE 4: EXAMPLES OF OPEN-ENDED QUESTIONS

1. [To participant at public legal lecture series]
Please tell us one thing of value to you that you learned at the program.
2. [To workshop participant after first of two days]
Is there anything you would like dealt with again or clarified from today's session?
3. [To external agency representative to obtain feedback on organization with PLEI component]
When you make a referral to (the organization), what are your expectations that (the organization) will do?
4. [Same as 3 above]
Are there areas of service which you feel the (name) society should be involved in that we are not in at present?
5. [To reader of PLEI booklet; tear-out sheet]
Describe the parts of this booklet which were difficult to understand.
6. [To a sponsor of a short term PLEI project; follow-up questionnaire]
Were there any changes in the focus of the project? If so, how did this occur?
7. [Same as 6 above]
Why did you choose any particular strategy, activity or media format? (i.e. workshops, lectures, print, film, TV, etc.)
8. [Question from oral interview with individual farmworkers who had read a pamphlet on the rights of farmworkers]
Did the pamphlet provide you with any new information which you could use to help solve a problem you (or a friend or family member) had? (Interviewer: the answers will take time; try to get as many details as possible and identify who had the problem - interviewee, family member, friend).
9. [Question at end of mail-out questionnaire to libraries involved in PLEI]
You may have other concerns about your legal collection, your training in its use, its useage by the public, or your relations with the (funding and training organization). Please feel free to add comments here.

Table 5 lists advantages and disadvantages of open-ended questions. The list helps to emphasize the importance of considering your evaluation purposes, your audience, the situation in which the questionnaire is being filled out, and the implications for data analysis and the final evaluation report.

TABLE 5: ADVANTAGES AND DISADVANTAGES OF OPEN-ENDED QUESTIONS	
Advantages	Disadvantages
Useful when range of choices is too large, or choices hard to predict.	Sometimes are an excuse for not clarifying the type of information the evaluator is seeking.
Useful for explorative interviews (e.g. needs assessment).	Some respondents have difficulty expressing themselves, and so may not answer questions. (May not be appropriate for mail-out surveys.)
Useful for piecing together decision-making processes or organizations' histories.	If too many open-ended questions, can be time-consuming for respondent. (May not answer questions on questionnaire itself).
Provide more freedom to respondent (e.g. to express particular viewpoints).	If administered by an interviewer, the interviewer requires adequate "probing" and recording skills.
Quotes from respondents can lend colour or extra meaning to evaluation report.	Take more time and skill to analyze, score and write up.
	Quotes from open-ended questions might be used in an unrepresentative or biased manner in the evaluation report.

Open-ended questions have distinct advantages in the following situations:

- When you want to obtain information which is very specific or unique to the respondent.

- When you can't reasonably predict answers, or where the range of choices would be too large.
- When your intent is explorative (i.e. you are open to a range of suggestions, and don't want to constrain the respondent).
- Often in the first phase of a needs assessment open-ended questions will be used in a small number of face-to-face interviews to explore a topic and narrow down the potential range of issues and choices. The second phase might then involve close-ended questions with limited choices.
- Where you are trying to piece together the history or past decision-making processes of a project or organization. This need will often arise in a demonstration project that has gone through developmental phases. You will want to gather lots of background information so that other groups understand how the project was established.

Another advantage to open-ended questions is that they furnish direct quotes from respondents. This can help the person analyzing the data understand subtler differences between responses. They also can be used directly in the evaluation report, and are often more interesting and relevant to the reader.

Open-ended questions also have disadvantages. They are time-consuming to analyze in a fair and meaningful way. It may also prove tempting to use a juicy quote in the evaluation report which really does not represent the overall trend of the responses. Assess the skills of the person doing the data analysis and/or report writing. If they don't have the skills to analyze the data which may emerge from open-ended questions, it may be better to stick with close-ended questions.

Similar thought should be given to the skills of the respondent and (if any) the interviewer. If the respondent is likely to express him/herself poorly in writing, then open-ended questions should not be used in questionnaires which the respondent has to fill out (e.g. classroom or mail-out questionnaires). This is less of an issue when answers are recorded by the interviewer. However, in such cases you need to be sure the interviewer has the necessary skills to clarify the question, to make "probes" (see interview instructions in Table 4, question 8), and to record answers accurately and fairly. Recording answers "fairly" may seem straightforward in theory. However, in practice, if a respondent gives a long and/or complicated answer, it is tempting to record only those parts of the answer which you remember, which seem interesting, or which fit your own biases.

Open-ended questions should not be used as a substitute for seriously thinking about the type of information you want. Such lack of forethought often leads to vague questions. Too often questionnaires end up with the question "Other comments?" It does not take a lot of energy to specify some of the issues about which you would like to receive "other comments" (see example 9 in Table 4). This investment in energy usually pays off in more detailed comments by the respondent.

2.2.2 Close-ended questions

Examples 20 through 26 illustrate two types of close-ended questions which are commonly used by PLEI groups. The first type (examples 20 & 21) has close ended questions with **graded** answers. These typically ask the respondent to assess something (a statement, a presentation, an event or workshop) by selecting one of several graded choices. The choices are related to a single dimension or factor (e.g. satisfaction, usefulness, agreement, etc.). The questions can deal with one item (Example 20) or several (Example 21). They are useful for measuring such factors as intensity of opinions or frequency of activities.

EXAMPLE 20: CLOSE-ENDED QUESTION WITH GRADED CHOICES

To what extent do you agree or disagree with the following statement
"Not being able to size up the client is a real problem in giving
legal information over the phone."

- ☐ (a) STRONGLY AGREE
- ☐ (b) AGREE
- ☐ (c) NEITHER AGREE NOR DISAGREE
- ☐ (d) DISAGREE
- ☐ (e) STRONGLY DISAGREE

EXAMPLE 21: CLOSE-ENDED QUESTION WITH GRADED CHOICES

[Question to public libraries involved with legal materials.]

Below are listed some sources to which you might refer people if you
cannot assist them with a legal information inquiry. Please indicate
the relative frequency of such referrals by placing a tick in the
appropriate column to the right of each item.

	VERY FREQUENTLY	FREQUENTLY	INFREQUENTLY	NEVER
a) TO ANOTHER LIBRARY SPECIFY: _____ _____				
b) TO A LAWYER				
c) TO SPECIFIC GOVERNMENT DEPARTMENT				
d) LEGAL AID OFFICE OR COMMUNITY LEGAL CLINIC				
e) MLA'S OR MP'S OFFICE				
f) LAWYER REFERRAL SERVICE				
g) OTHER (SPECIFY): _____ _____				

As shown in section 2.1 (examples 6-13) these questions require careful wording. Since they are usually designed to assess only one dimension at a time, you must consider which dimensions are relevant to your organization. If properly worded, the questions are easy for respondents to complete, and for the evaluator to tabulate and analyze. They also lend themselves to fairly sophisticated quantitative analysis techniques.

The second type of close-ended questions (examples 22-25) involves **ungraded** answers (i.e. there is not a progression of choices along a continuum). There are several uses for such questions. One is for testing of legal knowledge or legal awareness (example 22). Another simpler version of testing (perhaps painfully reminiscent of high school exams) is the true/false question. Some PLEI organizations have used these in tests of school-based curriculum. Ungraded close-ended questions can also be used as a "checklist" or "shopping list" (examples 23 and 24). Such lists are simpler for respondents to use, but instructions must be explicit as to whether more than one response is possible.

These questions can also be used to obtain ranking of items (Example 25). Care must be taken in constructing rank questions. The example given appears to be straightforward, but the items are not mutually exclusive. For example, a lecture may be accompanied by a discussion, film and/or information booklets. Furthermore, some topics may lend themselves better to certain formats (e.g. a presentation on environmental law could be enhanced by a film; a do-it-yourself divorce seminar may require a combination of lecture, sample forms and discussion). See also the discussion of mutually exclusive criteria in section 2.1.5.

EXAMPLE 22: CLOSE-ENDED QUESTION WITH NON-GRADED CHOICES

Below is a list of legal problems people sometimes face. If you or someone close to you faced EACH of these problems, where would you go for help? Using the sources listed in the table below (SOURCES OF HELP), write the number of your first choice beside each problem.

- | | |
|---|---|
| ___ You were dismissed from your job without a reason | ___ You applied for social assistance and were refused |
| ___ You want to write a will | ___ Your house was broken into |
| ___ You were refused service in a store or restaurant | ___ You know of a case of child abuse |
| ___ You couldn't get a bank loan | ___ Your neighbour's pet injured you |
| ___ You were sexually assaulted | ___ You wanted to buy a house |
| ___ You were involved in a minor car accident | ___ You were required to testify in court |
| ___ You wanted to complain about a government office | ___ You tried to return a purchase but a refund was refused |
| ___ You were injured at work | ___ You were assaulted by police |

SOURCES OF HELP			
LEGAL AID OFFICE	01	SCHOOL	08
HUMAN RIGHTS COMMISSION	02	RAPE CRISIS CENTRE	09
OMBUDSMAN	03	POLICE	10
RENTALSMAN	04	OTHER COMMUNITY AGENCY	11
OTHER GOVERNMENT	05	UNION	12
LAWYER	06	POLITICIAN	13
CLERGY OR CHURCH LAYPERSON	07	DON'T KNOW	14

EXAMPLE 23: CLOSE-ENDED QUESTION WITH NON-GRADED CHOICES

Following the classroom visit or the field trip experience, what happened? Did you (Check one or more)

- ___ DISCUSS THE EXPERIENCE WITH THE OTHER MEMBERS OF YOUR CLASS?
- ___ DISCUSS THE EXPERIENCE WITH YOUR TEACHER?
- ___ REPORT BACK TO THE CLASS ON THE EXPERIENCE?
- ___ DO SOMETHING ELSE? (EXPLAIN) _____
- _____
- _____

EXAMPLE 24: CLOSE-ENDED QUESTION WITH NON-GRADED CHOICES

[To public librarians.]

How do you make the public aware of your legal collection? Please check any of the following methods you use.

- ☐ LEGAL BOOK DISPLAYS
- ☐ LEGAL WORKSHOPS OPEN TO THE PUBLIC (EITHER SPONSORED OR CO-SPONSORED BY THE LIBRARY)
- ☐ PAMPHLET DISPLAYS IN THE LIBRARY
- ☐ MEDIA ADVERTISING .
- ☐ FILMS DEALING WITH LEGAL ISSUES
- ☐ OTHER MEANS (PLEASE DESCRIBE): _____

- ☐ NO SPECIAL MEANS

EXAMPLE 25: CLOSE-ENDED QUESTION FOR RANKING CHOICES

These classes can be given in a variety of ways. Please indicate your preferences for information delivery by placing a 1 beside your first choice, a 2 beside your second, and so on to a 6 beside your last choice.

- ☐ LECTURE FROM A LAWYER
- ☐ PANEL PRESENTATIONS
- ☐ INFORMAL GROUP DISCUSSIONS
- ☐ FILMS OR VIDEO TAPES
- ☐ INFORMATION BOOKLETS
- ☐ OTHER (SPECIFY): _____

Ungraded close-ended questions can also be used to obtain ratings (example 26). Ratings are different from rankings. Rankings judge methods, speakers, or topics in relation to each other (this is called a "norm-referenced" approach). Ratings judge methods, speakers or

EXAMPLE 26: CLOSE-ENDED QUESTION FOR RATING CHOICES							
Please rate each of the speakers and workshops listed below, using the scale provided. The items on which we would like you to rate the speakers are stated at the top of each column. Just tick the final column if you did not attend the workshop or hear the speaker.							
SCALE: 5 = excellent 4 = good 3 = adequate 2 = marginal 1 = poor	Time Allotment	Knowledge	Organization	Delivery	Materials	Overall	Did Not Attend
Keynote speaker: Dr. Jane Doe							
Public address: Ms. J. Expert							
Panel: Mr. I.M. Good							
Dr. I.M. Better							
Ms. I.M. Best							
R.C.M.P.							
Workshops: The victim's perspective							
The multidisciplinary response in your community							
The sex offender: characteristics, issues and treatment options							
The legal system: help or hindrance							

topics by some standard (criterion) of goodness or usefulness (a "criterion-referenced" approach). Sometimes the two approaches can be combined. In example 26, the ratings might produce a ranking of all the speakers, assuming none had the same score, and assuming "excellence" was the basis of ranking. However, if you wanted to rank them according to USEFULNESS to your work, an "excellent" speaker may be ranked lower than a "good" speaker. This again points out the importance of knowing what kind of information you are seeking.

Note that only Examples 20, 22 and 26 are strictly close-ended. The rest are partially close-ended, in that they give the respondent the freedom to write in their own choice or add a comment. Obviously if the evaluator is not sure s/he can predict all possible choices, it is useful to give the respondent the option to add one or more choices. Although inclusion of an option can create more work during data analysis, it also acts as a check on the comprehensiveness of your categories.

2.3 Ways of structuring the questionnaire

Even if questions are well worded and individual questions are carefully structured, it is important to consider the overall design of the questionnaire. The order in which questions are asked can make the task of filling out a questionnaire much easier for the respondent. This in turn affects the rate of questionnaire returns and also the quality of answers.

2.3.1 Logical order of questions

Questions should be arranged in a logical order. Respondents should be able to follow the flow or sequence of the questions, rather than feel they are "jumping around". The questionnaire in Table 6 (pp. 165-167) includes headings which describe this sequence: "getting information about the law," "getting legal help", "your interest in legal topics," "communicating with you about the law," and "some final

TABLE 6: SAMPLE QUESTION SEQUENCE IN MAIL-OUT SURVEY QUESTIONNAIRE TO THE GENERAL PUBLIC

NOTE: This table shows a question sequence for a 7-page mail-out questionnaire designed to evaluate the effectiveness of a provincial PLEI organization. The sample SUMMARIZES each question. It does NOT include choices, instructions or details provided in the original questionnaire. Wording has been changed slightly from some of the original questions. Information in closed brackets [--] indicates the type of choices offered in the original questionnaire.

GETTING INFORMATION ABOUT THE LAW

1. If you needed some information about the law, which of the following sources would you use?
[close-ended, ungraded choices]
2. Have you ever used any of the above sources when you've had a legal problem? (if no, skip to question 5).
[yes/no]
3. For each source you used, please indicate how satisfied or dissatisfied you were with the information you received.
[close-ended, combination of graded and ungraded]
4. In the last year, how many times have you used ANY source for legal information?
[open-ended]

GETTING LEGAL HELP

5. Below is a list of legal problems people sometimes face. If you or someone close to you faced each of these problems, where would you go for help? (List of potential sources of help was provided in original questionnaire.)
[close-ended, ungraded choices]
6. In the last year, how many times have you had one of the above problems, or one like it?
[open-ended]
7. Did you seek help for these problems?
[yes/no]
8. Many people are interested in a variety of legal topics. Below is a list of main topic areas and sub-topics. Can you tell us which of them is of interest to you?
[close-ended, ungraded]

cont'd...

Table 6 Cont'd

COMMUNICATING WITH YOU ABOUT THE LAW

9. Please indicate how you would most prefer to learn about the law, by writing a (1) beside your first choice, (2) beside your second choice, and so on to (6) beside your last choice of learning.
[close-ended, ungraded, ranking]
10. Have you heard of the (name of PLEI society) before receiving this questionnaire?
[yes/no]
11. Have you read any of (name of PLEI society)'s publications?
[yes/no]
12. In general, did you think they were (choices given)?
[close-ended, graded]
13. Where did you obtain the publication?
[close-ended, ungraded]
14. Have you watched the TV program sponsored by (name of PLEI society)?
[yes/no]
15. In general, was it (choices re informativeness)?
[close-ended, graded]
16. Have you heard a radio program sponsored by (name of PLEI society)?
[yes/no]
17. In general, was the radio program (choices re informativeness)?
[close-ended, graded]
18. Have you heard of the free law classes sponsored by (name of PLEI society)?
[yes/no]
19. Have you attended any of these classes?
[yes/no]
20. In general, did you find these classes (choices re informativeness)?
[close-ended, graded]
21. These classes can be given in a variety of ways. Please indicate your preferences for information delivery by placing a (1) beside your first choice, a (2) by the second, etc.
[close-ended, ungraded, ranking]

cont'd...

Table 6 Cont'd

22. Would you be interested in attending any of (name of PLEI society)'s free law classes?
[yes/no]

SOME FINAL QUESTIONS ABOUT YOU

The extent to which people want legal information may vary, depending on their circumstances. Please answer the following questions so that we can improve our programs for you and people like you. There is no way in which you can be identified; all of your responses are CONFIDENTIAL.

- 23a. Where do you live? (choices of cities provided)
[close-ended, ungraded]
- 23b. (For those outside the province or not among choices in 23a.) What is the name of the community in which you live?
[open-ended]
24. For how many years have you lived in (name of province)?
[open-ended]
25. Do you sometimes speak a language other than English at home?
[yes/no]
26. What is the last level of education you have COMPLETED?
[close-ended, ungraded]
27. What is your occupation?
[close-ended, ungraded]
28. What was your total family income last year, before taxes?
[close-ended, ungraded]
29. In what age category are you?
[close-ended, graded]
30. And what is your sex and marital status?
[close-ended, ungraded]
31. How many dependents under 18 do you have?
[open-ended]
-

questions about you." In longer questionnaires, such headings are a useful guide to the respondent. If they are not included, the designer of the questionnaire must at least be able to identify the logical sequence of the questions.

In Table 7 a revision of a workshop questionnaire is suggested. The main purpose of the revision is to group the questions on workshop content BEFORE the overall assessment questions. This allows the respondent to do a mental "adding up" of the workshop components before producing the "total" overall assessments. The overall assessments can also be ordered. For example, an understanding of how to operate a phone-in service (new question 6) is one component of usefulness to the organization (new question 7), and therefore it precedes it. Usefulness to organizational needs (new question 7) is one component of overall satisfaction (new question 8).

TABLE 7: QUESTION SEQUENCES IN TRAINING WORKSHOP HAND-OUT QUESTIONNAIRES

NOTE: As per Table 6, questions are summarized, and do not include details and choices provided in the original.

ORIGINAL ORDER	NEW SUGGESTED ORDER
1. I found the amount of material presented in the workshop ...	1
2. How useful to your organizational needs did you find the workshop?	7
3. Overall, how would you rate the presentation of material by the resource person?	2
4. Did the workshop live up to your expectations regarding the amount you would learn about phone-in services?	5
5. How would you rate your understanding of how to operate phone-in services after attending this workshop?	6
6. What did you like best about the workshop?	3
7. What did you like least about the workshop?	4
8. How would you rate your overall satisfaction with the workshop?	8

Table 8 provides a similar example for a hand-out questionnaire to a general audience. There is a chronological flow to this questionnaire, running from preliminaries, the workshop itself, an assessment, to possibilities for the future. The best placement of original question 3 is problematic: it does relate to preliminary expectations, but it also involves a summing up or overall assessment. One solution would be the suggested sequence revision in the table. Another would be to divide the question into one question about original expectations in the preliminary section, and a second about how the expectations were met in the assessment section.

TABLE 8: QUESTION SEQUENCE IN PLEI WORKSHOP FOR GENERAL PUBLIC (HAND-OUT QUESTIONNAIRE)

NOTE: As per Table 6, questions are summarized and do not include details and choices provided in the original.

ORIGINAL ORDER	SUGGESTED ORDER
1. How did you find out about this program?	1
2. What was the biggest problem you had to overcome to get here?	2
3. a) Did you come to this session with a specific concern or question?	8
b) If so, explain briefly.	
c) Was it answered effectively?	
d) As a result of the workshop, will you (choices about how respondent will deal with his/her concern).	
4. Was the timing of this event convenient?	3
a) If no, what would have been a better time?	
5. If there was a course outline, would you describe it as (choices re usefulness)?	4
6. Some speaker(s) state their objectives before a program starts. If your speaker(s) did this, did they (choices re carrying out stated objectives)?	5
7. Was the topic (choices re time allotment)?	6
8. Did you feel the session was (choices re degree of organization)?	9
9. Were the materials you received (choices re quality)?	7
10. Will you come to this type of session again?	12
11. Did you think the event was (choices re informativeness)?	11
12. Do you think the speaker was (choices re vitality)?	10
13. What other areas of the law are you interested in?	13

2.3.2 Grouping similar types of question structure

Where possible, and without violating the logical sequence of questions, you should group similar question structures together (e.g. close-ended multiple choice questions, yes/no questions, open-ended questions, ranking questions OR regular combinations of each of these). This allows the respondent to read through directions for one SET of questions, and then develop a rhythm for answering questions of that type. The questionnaire in Table 6 (pp. 165-167) facilitates this rhythm by having several large close-ended ungraded questions at the beginning, then a regular alternation between yes/no and close-ended graded questions in the middle section, followed by brief open- or close-ended questions at the end.

2.3.3 Placement of sensitive questions

Sensitive questions should generally be placed towards the end of the questionnaire. The questionnaire in Table 6 groups all personal questions at the end, and provides a few lead-in statements to reassure the respondent that their personal statistics won't become fodder for the National Enquirer. Some respondents are sensitive about revealing their education level, income, age or marital status.

In some instances it may be useful to know if a PLEI workshop (e.g. on juvenile or criminal court procedures) is attended by persons actually charged with an offence. Example 27 suggests how a series of questions could replace one very bald, direct question. Although the first of the five questions in the revised example is not completely necessary, the second sets a tone of serious thought about the provision of legal information, and may make the respondent more willing to share facts about his/her personal circumstances.

EXAMPLE 27: QUESTION DEALING WITH A SENSITIVE ISSUE

SAMPLE QUESTION Have you ever been charged with a criminal offence?
_____ YES _____ NO

- REVISION
1. Do you feel that over the past few years the frequency of crime has increased, stayed about the same or decreased in (name of community)?
_____ (a) INCREASED
_____ (b) STAYED ABOUT THE SAME
_____ (c) DECREASED
 2. Some people feel that there is too much information on rights given to people charged with crimes. Others feel there is not enough such information. What is your opinion?
_____ (a) TOO MUCH INFORMATION IS AVAILABLE
_____ (b) THE AMOUNT OF INFORMATION IS JUST RIGHT
_____ (c) TOO LITTLE INFORMATION IS AVAILABLE
 3. It would help us to know if this workshop is reaching people who have been charged with a criminal offence. Do you know a friend, relative or other person who has been charged with a crime, to whom you hope to pass on information from this workshop?
_____ YES _____ NO
 4. Would you mind telling us about yourself? Have you been charged with a criminal offence? (As you can see, there is no way of our identifying you in this questionnaire.)
_____ YES _____ NO
 5. Has a decision already been reached in your case?
_____ YES, A DECISION HAS ALREADY BEEN REACHED
_____ NO, A DECISION HAS NOT BEEN REACHED

2.3.4 Transition sentences and explanations

Transition sentences help to ease the respondent into a different set of questions or to prepare him/her for a sensitive question. Examples precede question 23a in Table 6 and questions 3 and 4 in the revision of Example 27.

Explanation should also introduce the entire questionnaire. For example, this explanation preceded a mail-out questionnaire by the Public Legal Education Association of Saskatchewan.

EXAMPLE 28: PRELIMINARY INSTRUCTIONS

The questionnaire is easy to complete. In most cases, the responses to each question have a number beside them and all you have to do is circle the number of the response which is closest to your opinion.

Question 5 is somewhat different. It asks you to examine a range of options, and then write the number of the option you would choose in the spaces beside each problem.

Sometimes you may answer OTHER to a question (as in Questions 1, 9, 13, 21). If you do, please legibly write what you mean by "other" in the space provided.

We hope you enjoy answering our questions. Thanks for your help.

A final form of explanation is the instruction for "screen" questions (i.e. questions that only some respondents answer). Often these instructions appear as in the original of Example 29. Using boxes, arrows, indentations and renumbering questions, the instructions can be much clearer, as in the revision.

These types of changes may seem unimportant if questionnaires are viewed simply as a process of asking questions. However, they are vital as "navigational aides" for the respondent. They often make the difference between a low and high response rate.

2.4 Considering special needs of certain groups

For some groups, questionnaires may be unsuitable, and you will want to consider group meetings or other ways of collecting data. Where questionnaires are used, it is important to adapt them as much as possible to the

EXAMPLE 29: INSTRUCTIONS FOR SCREEN QUESTIONS

ORIGINAL QUESTION

Q. 19 Have you attended any of our free law classes?
(If no, or not sure, skip to Question 22)
1. NO
2. NOT SURE
3. YES

Q. 20 In general, did you find these classes
1. UNINFORMATIVE
2. MODERATELY INFORMATIVE
3. VERY INFORMATIVE

REVISIONS

Q. 19 Have you attended any of our free law classes?
1. NO
2. NOT SURE
3. YES

If "NO" or "NOT SURE", skip
from here to Q. 20 on next page

Q. 19a In general, did you find these classes
1. UNINFORMATIVE
2. MODERATELY INFORMATIVE
3. VERY INFORMATIVE

particular characteristics of the target group. Every decision you make in terms of wording or layout will affect the response rate to the questionnaire. For example, in order to make a questionnaire inexpensive or small enough to include as a tear-out sheet in a booklet, a group might decide to use small print type. This decision may bias the rate of responses from elderly people, who would find small print too much of a strain to read.

It is not always possible to make allowances for all groups. If your language in a mail-out questionnaire is too sophisticated, it may confuse individuals for whom English is a second language, or who lack literacy

skills. If your language is too simple, it may appear condescending to individuals who are quite literate. In either case, it is important to realize that you may be biasing the results because of the language and style choices you make.

If you are developing a questionnaire for a distinct or homogeneous group, it is easier to tailor the language and types of questions. Two such groups are discussed below.

2.4.1 Young people

Questionnaires will never seem as exciting to students or young people as some of the new formats in which PLEI material is presented (e.g. comics, video), but they can attempt to be responsive to young people's emotional lives. The question in Example 30 is a simple way to assess student understanding of a PLEI puppet show.

EXAMPLE 30: PERSONALIZED QUESTIONS
(re student understanding of a puppet show)
If a classmate who missed the show asked you what it was about, what would you tell him?

Rather than asking, "What was the show about?", the question is personalized by involving the idea of another student. This question could be verbally answered by an elementary student (especially ages 6-10) and recorded by an interviewer.

Examples 31 and 32 use happy faces. Young elementary children could handle the exercise themselves, although the instructions may need interpretation. The main advantage of the symbols is that young children can grasp the visual graduations more easily than they can handle written cues. Symbols could also be used to illustrate the

EXAMPLE 31: HAPPY FACES

Look at the faces below.
The happy ones agree with the sentence.
The sad ones don't agree with the sentence.
Circle the face that shows how much you agree with the sentence.

The Queen was fair to Alice in court.



EXAMPLE 32: MORE HAPPY FACES

Look at the faces below. The happy ones are interested.
The sad ones are bored.
Put a mark (X) under the face which shows how you felt when you were learning about the law.

Looking at the puppet show



Going on the court house tour



Talking to the judge afterwards



Talking to the policeman in class



various items -- a little puppet theatre, a building (court house), a judge (in flowing robes if they were worn), and a policeman with a dog (if there was one). The symbols should reflect the setting or

experience for the child. For an adult, a scale of justice may represent the court house, or a gavel the judge, but a child might not relate to these symbols. At the same time, the symbol must not be too evocative. If you show a picture of a policeman and a dog, a happy face may indicate interest in the dog rather than the policeman.

Example 33, would be appropriate for older children (age 10+)

EXAMPLE 33: SEMANTIC DIFFERENTIAL									
The booklet on "Youth and the Law" was: (Put an X in the best space between each set of words)									
interesting								horing	
useless								useful	
easy								difficult	
accurate								false	
old fashioned								trendy	
clear								confusing	

"Semantic differential" is jargon for finding out what people feel about something by providing opposing word cues. For children (and adults) it is a less ponderous method than answering a long series of individually scaled questions. The use of evocative words (as long as they reflect what you want to know) tends to encourage responses more readily than the more pedantic sales discussed in sections 2.2 and 2.3.

Similarly, example 34 (open-ended sentences) encourages young people to project themselves into questions and express themselves. There is less control over responses, and they will require more interpretation than close-ended questions. The phrasing of questions

has to be carefully considered. If they sound too frivolous (the second and fourth sentences border on silliness), they may invite frivolous answers.

EXAMPLE 34: OPEN-ENDED SENTENCES

1. The thing that disturbs me the most about the law is _____
2. My advice to the judge in (Jacob Two-Two and the Hooded Fang) is _____
3. The thing that bugs me the most about the booklet is _____
4. If I wasn't a nice, decent, law-abiding student, I would love to _____
5. Puppet shows are okay, except for _____
6. My advice to the author of our law text is _____
7. The old toad was a pretty rotten character, except for _____

2.4.2 Persons for whom English is a second language

Many organizations develop PLEI programs for groups which do not speak English as a first language. Often such programs involve translating materials into other languages. In such cases, it will usually be necessary to write evaluation questionnaires in the respondent's mother tongue.

If you cannot afford translations or translators, questionnaires for respondents who speak English as a second language must be worded with great care. Short or informal words aren't necessarily easier to understand than long ones. Terms like "somewhat," "just right," "way

too long," "a little too much," "about what I expected" or "pretty good" often appear as choices in graded questions. These terms are often easier than formal terms for English-speaking people, because they have an "everyday" friendly tone. However, for people who speak English as a second language, such terms are often harder to understand than more formal but obvious gradations like "excellent/good/fair/poor/very poor" or "above average/average/below average."

Many terms which seem to be standard legal terms to English speaking or French speaking Canadians may carry different meanings to persons of other cultures. For example, a questionnaire exploring the legal needs of Southeast Asian refugees used the term "human rights". Most of the respondents felt this term included the idea of social benefits (e.g. family allowance and old age pensions.) In English and French law, human rights usually is associated with the idea of "natural rights" possessed by man because of his humanity rather than because of particular legislative programs.

The same questionnaire asked whether the respondents had encountered "discrimination". Many of the respondents provided examples of being refused credit. The authors of the report made the surprising conclusion:

Canadians would not perceive credit or refusal of credit to be a discriminatory matter, but purely financial.

This conclusion is certainly debatable, but it reinforces the point that common legal terms do not always mean the same thing to all respondents. If you have doubt about how a term will be interpreted, define what you mean.

3.0 SURVEYS AND INTERVIEWS

3.1 Overview

A survey is a way of broadening your understanding of an issue or problem. It usually involves the following steps:

- Deciding on your target population (e.g. persons who have attended workshops; persons who have used your PLEI materials; residents in a particular community; social workers in the province).
- Deciding on the most appropriate method of surveying that population (mail, telephone or face-to-face).
- Selecting a "sample" of the population.
- Developing the survey questionnaire.
- Training interviewers (for telephone or personal interviews)
- Pretesting the questionnaire.
- Carrying out the survey itself.
- Analyzing and writing up the results.

Below are examples of Canadian PLEI surveys over the past decade. They demonstrate the diversity of purposes and methods of conducting surveys. They also show that surveys are often conducted in tandem with other data collecting methods.

- The Public Legal Education Association of Saskatchewan used a Department of Justice grant to undertake
 - (a) an inventory of PLEI needs of residents in the province
 - (b) an inventory of the effectiveness of the PLEA in satisfying the legal needs of the public.

The students involved in the summer project sent a mail-out questionnaire to 1000 Saskatoon residents picked randomly from the current telephone directory.

- Public Legal Information Services Inc. in New Brunswick undertook a needs assessment to determine the need for legal, educational and information materials as identified by community based groups. The needs assessment consisted of a mail survey, telephone interviews, personal interviews and field investigations to list the PLEI materials, programs and institutions that were available.
- The Public Library Program (PLP) of the B.C. Legal Services Society provides funds to public libraries to purchase legal materials. It hired consultants to do a mail survey of the libraries to which it gave grants. The survey assessed the extent of the legal collections, client use and satisfaction, and librarian satisfaction with the PLP. A similar survey was done of libraries that did not receive grants to assess the extent of their legal collection and the type of legal inquiries they receive. Supplementary information was collected through telephone and face-to-face interviews with librarians, administrators and library users.
- The Legal Resource Centre in Alberta wanted an assessment of their legal education puppet show and of alternatives to it. Under the guidance of a psychology professor from Carleton University, an

extensive survey was undertaken of students and teachers in schools visited by the show. Interviews were conducted on site and in person.

- The Canadian Law Information Council and Community Legal Education Ontario had put together a teachers' kit entitled "Before the First Day: Teaching Law for the First Time" for Ontario teachers. Since they had received only 35 evaluation responses on tear-out sheets from over 700 kits, CLIC obtained a summer student grant to do a follow-up telephone survey of teachers who received kits. The survey assessed the effectiveness and usefulness of the kit.

3.2 Comparing mail, telephone and face to face surveys

There is no single most appropriate survey method. Your choice depends on several factors:

- Available money and manpower
- Type of information you are seeking
- Concerns about accuracy
- Sampling problems

Table 9 is a comparison of mail, telephone and face-to-face surveys. Consider your organizational capabilities and target population in terms of the issues in the table. This should help you decide on the most appropriate survey method. The issues listed are not necessarily of equal importance. It is up to you to decide which are priority issues for your organization.

Each method is described in more detail in sections 3.5 through 3.7.

TABLE 9: COMPARISON OF MAIL, TELEPHONE AND FACE-TO-FACE SURVEY METHODS*			
Situation	Mail	Telephone	Face-to-Face
IF YOU ...	THEN USUALLY THIS METHOD IS ...		
<u>COST/TIME/PERSONNEL</u>			
- Lack money generally	good	satisfactory	poor
- Lack trained interviewers	good	poor	poor
- Lack time (ie. require a quick survey)	poor/satisfactory	good	poor
- Need to serve a wide geographic area with limited funds	good	satisfactory	poor
<u>INFORMATION NEEDS</u>			
- Have a complicated series of questions	satisfactory	poor	good
- Have many open-ended questions	poor	satisfactory	good
- Have ratings and many alternatives for the respondent to consider	good	poor	satisfactory/good
- Have "sensitive" questions	satisfactory	satisfactory	good
- Have a long questionnaire	poor/satisfactory	satisfactory	good
- Need to probe for deeper answers/clarifications	poor	good	good
- Think respondent would want to be anonymous	good	poor	poor
<u>ACCURACY</u>			
- Want to avoid respondents trying to please the interviewer with "correct" answers	good	satisfactory	poor
- Want to avoid interviewer bias or misunderstanding	good	poor	poor
- Want to have control over order in which questions are asked	poor	good	good
- Want to have control over who answers the questions	poor	satisfactory/good	good
- Want respondent to have opportunity to gather more complete information	good	poor	poor
- Want spontaneous answers	poor	good	good
- Want all questions answered	poor	good	good
<u>SAMPLING</u>			
- Want to obtain representative sample but have no complete lists of target population	satisfactory	satisfactory	good
- Want to locate respondents who are often not at home	good	good	poor
- Want to avoid bias because of high refusal rate	poor	satisfactory/good	good
- Want to avoid bias because your respondents are not literate	poor	good	good
- Want high response rates (general public)	poor/satisfactory	good	good

*This table is an amalgamation and adaptation of several sources, chief of which is Dillman, 1978: 74-75.

3.3 Selecting a sample

Usually the idea of a survey is to contact a large number of people within a defined group in order to collect information for your program. The total group -- that is, all possible people or institutions who COULD be chosen -- is called the "population". For example, a population could refer to:

- all people who attended PLEA-Saskatchewan workshops in a given year.
- all public librarians handling law-related materials in British Columbia.
- all teachers in Ontario who have used the CLIC kit on teaching law for the first time.
- all residents of Winnipeg, Manitoba.
- all Southeast Asian refugees in Calgary, Alberta.

It may be possible to survey ALL members of the population, if that population is small to moderate and your resources are adequate to the task. PLEI groups sometimes want to survey a population such as secondary school law teachers, heads of social service agencies in a given region, or participants in a workshop. In such cases a survey of the entire population may be quite feasible.

With larger populations it is usually necessary to chose a sample. This means you select a limited number of cases (people, institutions, places) from the total population. If certain procedures are followed, your sample will produce results which reflect (i.e. are representative of) the results you would have obtained from the overall population. There are several ways of taking samples. Their appropriateness depends on your purpose.

3.3.1 Random sampling

RANDOM sampling is necessary if you want to be able to generalize, that is, say something accurate about the population, based on your sample results. A sample is random if each member of the population has an equal chance of being chosen. For example if all the names of the population are written on paper and put in a barrel, mixed well and then drawn one by one, each has an equal likelihood of being drawn. This can be a cumbersome way of ensuring you have a random sample if 1000 names are involved.

A second method of random selection is using a list of the population (e.g. telephone directory, all high school law teachers, Law Society lists of lawyers) and selecting names using a table of random numbers. These tables frequently appear in statistics texts and are easy to use. Table 10 is a portion of a list from a much larger table of random numbers.

TABLE 10 TABLE OF RANDOM NUMBERS				
46	16	28	35	54
70	29	73	41	35
32	97	92	65	75
12	86	07	46	97
40	21	95	25	63

(from Hubert M. Blalock, Jr. Social Statistics, New York: McGraw Hill Book Co., 1960, 437).

Suppose you had a population of 95, and wanted to draw a sample of 30 names. First you would number all the names on the list from 1 to 95. Then you return to your table of random numbers and choose 1) a starting point for selecting your first number and 2) a systematic method of selecting your remaining 29 numbers (e.g. going across each

column or down each row). Establish this procedure BEFORE studying any of the names, so you can't be accused of deliberately biasing your choices. Let's say you decided to start at the top of column 2 in Table 10 and go down each column, the first four numbers would be 16, 29, 86, 21. (You would not use 97 because there are only 95 in the population.) The first four names selected for the survey would be the 16th, 29th, 86th and 21st on your list. You would continue going down successive rows of the table of random numbers until you have 30 numbers. (You would need larger tables than we have above.) If a number repeats itself (e.g. 46 and 97 on Table 10), just ignore it the second time. Then you would select the names opposite these 30 numbers on your list of names.

You could even use the above table if your population and sample required more digits (e.g. a population of 700 and sample of 200). Just combine two columns. Referring again to Table 10, if you started with the first three digits in the first and second columns, your numbers would be 461, 702 (although with a population of 700 you would throw it out), 329, 128 and 402. If by chance a number has already been selected, don't count it. Of course, it would be easier to use a table of random three-digit numbers.

A third method of selection which can be considered random for most purposes is selecting names at fixed intervals from a list. (This method is also called "systematic sampling"). For example, if you have a population of 600 and want a sample of 150, you would take every 4th name (divide 600 by 150). Your first choice of a name from the list cannot just be the first name. Since it must be a random choice, you might select the starting number from a random number table, or in this case you could put the numbers 1 to 4 in a hat, and draw one. If you draw the number 3, you would then pick 7, 11, 15 and so on until you reach the end of the list. If using a random number table you drew 151, you would select 151, 155, 159 and so on until the end of the list, and then start over at the beginning of the list.

3.3.2. Stratified sampling

Sometimes it is important to your research to be able to say something about particular groups within your population. If you chose a completely random sample, you might not have enough respondents in a given group to be able to say anything about the group. In a stratified sample, you choose your sample in the same proportions as your overall population. For example, suppose you develop 200 kits on youth and the law. They were distributed as follows: 80 to high school law teachers, 40 to legal clinics, 40 to youth workers, 20 to drug-alcohol counsellors, and 20 to youth organizations. If your sample is 80, you would divide it in the same proportions as the overall population. This would ensure that you have enough respondents to be able to report on the opinions of each group.

<u>POPULATION (200)</u>		<u>SAMPLE (80)</u>		
<u>Category</u>		% of total population		
	<u>Number</u>			<u>Number</u>
Law teachers	80	40	$.4 \times 80 =$	32
Legal clinics	40	20	$.2 \times 80 =$	16
Youth workers	40	20	$.2 \times 80 =$	16
Drug-alcohol counsellors	20	10	$.1 \times 80 =$	8
Youth organizations	20	10	$.1 \times 80 =$	8
	<u>200</u>			<u>80</u>

Stratification can be undertaken around any variable* that you think particularly important to your research purposes (e.g. areas in the province, age of children watching puppet shows, sex of public legal information inquirers, ethnicity), although you must have some means of reliably determining the original proportions of your population. You must also ensure that the sample is chosen randomly WITHIN each group once you have determined the group sample size.

*In statistics a variable is any characteristic that helps us distinguish between one individual or item and another in a sample.

3.3.3. Cluster sampling

Cluster sampling is a way of cutting down on costs and time when it is extremely difficult to select a random sample from across your whole population. For example, suppose you wanted to assess the public legal information needs of single parents in your city. Even if it were possible to obtain a list of single parents, their addresses would probably be scattered all over the city, which would cost a lot in travel time.

Instead of randomly sampling all addresses, you randomly sample a certain number of areas in the city. To do this, you first have to divide the city up into areas. This can be done in several ways. You could divide up a map into city blocks (this can be hard if streets are not straight!). You could obtain a listing of enumeration areas (they usually contain about 500 people) from a Statistics Canada Office. Or you could simply take a map of the city which has grid coordinates which divide the city into squares.

Once the city is divided into areas, you number all of the areas (blocks, enumeration areas or grid squares). Then, using a table of random numbers, draw the number of areas you desire. For example, if you had 100 city blocks and used the last two lines of Table 10, you would choose block numbers 35, 41, 65, 46, 25, 54, 35, 75, 97 and 63.

Your final step is to randomly sample houses (or names if you have a list) within each block you have drawn. Note that you have maintained the concept of random sampling, first in drawing your areas, then in drawing your respondents.

3.3.4. Purposeful sampling

Sometimes it is more important to understand something about a particular type of case or cases than it is to be able to generalize to the overall population. In this situation you may want to use what Michael Patton calls "purposeful sampling"*. For example, you may have limited funds to do some case studies on participants in a series of workshops you have given. Your objective might be to determine what type of participants get 1) really excited or 2) turned off at the workshop. Rather than drawing a random sample from all participants who have completed workshop questionnaires, you would select case studies only from those who had considered the workshops "excellent" or "very poor". These extreme cases may better answer your information needs than the more "average case."

The same logic can apply if you wanted to study groups which you have funded to do PLE workshops. The Public Legal Education Program of the B.C. Legal Services Society provides grants to community-based groups to carry out PLE workshops, print materials and undertake other PLE activities. In 1983, it hired a consultant to review 33 such projects from a three year period. It also did a purposeful sample of those projects in greater depth:

Two of these projects were selected because they were typical of many of the PLE funded projects (The "women in Need" Conference and the "Federated Anti-Poverty Group" workshop). The farmworkers brochure project was selected because of its uniqueness in trying to access an isolated group of people who are illiterate in the English language and are uninformed about their legal rights.

Thus sampling strategies don't have to be based on the desire to generalize to the overall population. Depending on your purposes, you may want to say a lot about a single case of special interest rather than a little about many randomly-selected cases.

*Michael Patton, 1980: 100-105.

3.3.5. Size of sample

We only had 2 weeks to do all the interviewing. We had distributed 700 booklets and we wanted to draw a sample size from this 700 which was scientifically sufficient. We kept looking up statistics texts to find out how large our sample had to be. We finally settled on 120.

Determining the correct size depends in part on how confident you want to be about the conclusions you draw from your sample findings, and the types of "tests" of your data you will want to make. Certain data analysis tests and the concept of levels of confidence are discussed in Module V. For purposes of this discussion we can make two generalizations:

- 1) The required size of your sample decreases as a percentage of the population, the larger the population becomes. For example, if you hope to say something about a population of 50, with a high degree of confidence, and a small margin for error, you will need a sample of 44 (88% of the population). If the population is 200, the sample size should be 132 (only 66% of the population). At 500, the sample is 217 (43%); at 2,000, the sample is 322 (16%); at 25,000 it is only 378 (1 1/2%)*.
- 2) You need a minimum of 25-30 units (cases, individuals, respondents) in the smallest sub-group that you might want to look at in isolation. For example, your overall sample of workshop participants for the year may be 300. However, if you want to be able to say something about seniors, there should be at least 25-30 seniors in your sample. If you were doing a provincial survey, you would want to ensure that you had at least 30 respondents from each region you wish to report on.

*from table in Abbey-Livingston and Abbey, 1982:59

Remember that the issue of sample size is dependent on whether you wish to be able to generalize to the overall population using appropriate statistical techniques. If you are using purposeful sampling, the size issue is less relevant.

3.4 Field-testing (pre-testing) questionnaires and methods

Pre-testing questionnaires is often seen as a nuisance that social scientists have foisted upon the information-gatherer. As a result, if done at all, pre-testing is conducted like a ritual with little meaning. Usually the purpose is ill-defined: e.g. "to do a dry run" or "to get the bugs out of the system".

Pre-testing can be useful if you determine in advance the particular "bugs" you want out of the system. For example, Dillman (1978:156) suggests focussing on such issues as the following:

- Is each of the questions measuring what it is intended to measure? (See for example, the discussion on questionnaire design and wording in Section 2)
- Are all the words understood?
- Are questions interpreted similarly by all respondents?
- Does each close-ended question have an answer that applies to each respondent?
- Does the questionnaire create a positive impression, one that motivates people to answer it?
- Are questions answered correctly?
- Does any aspect of the questionnaire suggest bias on the part of the researcher?

The purpose of pre-testing is to uncover problems with either the questionnaires, the procedures used to administer them, or the type of data they produce. It is generally assumed that the only useful method of

pre-testing is with a population which is almost identical to that of the real survey. It is true that by doing a mini-survey of this type you will get feedback on ways in which your respondents have problems with your questionnaire. But there are several other pre-test approaches which should be considered, either because you lack funds or because you are seeking a different type of pre-test information.

One method is to bring a group of respondents similar to the population together in a meeting and work through interpretation problems with them. A second is to pre-test the questionnaire with other PLEI colleagues. Unlike the respondent group, they would have a good grasp of the overall purpose of the study and issues which may be important. A third approach is to test the questionnaire on potential users of your data (e.g. a funder, your board, other agencies). They will be able to tell you if the questions will elicit the type of data they are interested in. Apart from the actual purpose of pretesting, you will help build interest in the results of the survey itself.

3.5 Mail surveys

As shown in Table 9, (p. 182) the main advantage of mail surveys is that they are less expensive than phone or face-to-face interviews. Their primary disadvantage is that response rates (i.e. the percentage of respondents who complete and return the questionnaire), are usually poorer than telephone or face-to-face interviews. There are several ways of improving response rates. Some of them have been covered in Section 2 in terms of improving wording, the structure of questions, and the order of questions. In paying attention to these issues you will make the questionnaire more intelligible, and more likely to be completed. But thought should also be given to how you "package" the questionnaire.

"Packaging" a questionnaire is somewhat like marketing a product. You want your respondents to be convinced that they have something important to say, and that it is worth their time to share their ideas or opinions with

EXAMPLE 35 - SAMPLE LETTER INTRODUCING PLEI
SURVEY

PUBLIC LEGAL EDUCATION - NEW BRUNSWICK

1234 Grant Street
Moncton, NB 41C 2A4



LETTERHEAD

October 1, 1985

Mr. Oliver Cromwell
1649 Charles End
Fredericton, New Brunswick
E3B 3E7



PERSONAL ADDRESS

Dear Mr. Cromwell:



PERSONAL
SALUTATION

The laws of our country affect us all, but sometimes they change so fast it is hard to keep up with what they are at any given time. As an organization dedicated to providing up-to-date information on the law, we at Public Legal Education - New Brunswick know that many of our free public workshops and booklets on various legal topics are in great demand. Unfortunately, though, we have a very incomplete picture of how well we are meeting the overall legal information needs of New Brunswick's residents, what people like yourself know about the law already and what you would like to know more about.

ESTABLISH REASON WHY THIS
STUDY IS IMPORTANT AND
RESPONDENT'S HELP IS
NECESSARY. DON'T LAUNCH IN
RIGHT AWAY SAYING "THIS IS
JUST A SHORT QUESTIONNAIRE
AND IT WON'T HURT YOU."

You are one of a small number of people in Fredericton whom we are asking to express an opinion on these matters. Your name was drawn in a random sample of all residents of the city. Only five other communities in New Brunswick are part of this survey. So that the results will properly reflect the attitudes of the people of New Brunswick, it is important that all questionnaires be completed and returned. We hope that you will be able to help us. In testing the questionnaire, we have found that it takes 10-15 minutes to complete.



EXPLAIN HOW HE IS IMPORTANT
TO THE STUDY.



GIVE SOME IDEA OF HOW LONG
THIS WILL TAKE.

(continued)

Your answers will be confidential, as you are not required to put your name on the questionnaire. The questionnaire is number coded, but that is only so that we can cross your name off our mailing list. That way you won't receive a second request to fill out the same questionnaire!

REASSURE RE CONFIDENTIALITY (NUMBER CODING IS NOT NECESSARY IF YOU AREN'T INTENDING TO DO FOLLOW-UPS)

We intend to use the result of this survey in our programming for 1985 and future years. Thus, you can be assured that your opinions will have an impact. We are also committed to letting you know what we find out. If you would like to receive a free summary of the results of this survey, please fill the appropriate box on the back of the return envelope.

SHOW THAT HIS OPINION WILL BE USED

We would be pleased to answer any questions you might have about the survey or the questionnaire. Our contact person in Fredericton is Elizabeth L. Beagle, and she can be reached at 383-6000.

OFFER AN INCENTIVE OR REWARD FOR COMPLETING QUESTIONNAIRE. ANOTHER OPTION (IF NO FOLLOW-UPS ARE INTENDED AND NO NUMBER-CODE IS USED) IS TO INCLUDE A STAMPED, ADDRESSED POST-CARD THAT CAN BE RETURNED SEPARATELY FROM THE QUESTIONNAIRE, ENSURING COMPLETE CONFIDENTIALITY.

GIVE OPPORTUNITY TO ASK QUESTIONS

Thanks very much for your assistance. We hope you find the questionnaire interesting.

THANKS

Yours truly,

SIGN IN INK THAT IS DISTINGUISHABLE FROM THE TYPE COLOUR (E.G. BLUE, RED, GREEN) TO ENSURE SENSE OF AUTHENTICITY.

Charles Stuart
Survey Director

you. A key way of emphasizing this message is in the covering letter which accompanies the questionnaire (see Example 35). Points to keep in mind when writing such a letter include:

- Use letterhead.
- Address the respondents personally (not "Dear Householder").
- Establish the importance of the study at the outset.
- Establish the importance of the respondent's participation.
- Give an accurate idea of how long the questionnaire will take (although short questionnaires are advisable in mail-out surveys, long ones have also obtained acceptable response rates. It can be contradictory to stress how important a questionnaire is when only 5 questions are involved!)
- Give assurances re confidentiality.
- Explain how results will be used.
- Offer some sort of incentive (if possible) for completing the questionnaire.
- If possible, give a telephone number if respondent has questions.
- Give thanks.
- Sign letter personally (not reproduced).

Another aspect of packaging is to ensure that the respondent can "navigate" the questionnaire with little effort. The layout needs to be easy to follow. Methods of improving layout include:

- Consider a booklet format. Often questionnaires are sent out on legal size (8 1/2" x 14") paper, which looks ponderous and intimidating. You can type the questionnaire on letter-size paper and reduce it to fit a booklet form, although small type is not advisable if seniors are a significant part of your target group (small type is hard to read). A design on the front of the booklet will nurture respondent interest, and will be evident that you are putting effort and thought into the questionnaire. If for financial reasons you can't consider a booklet format, do resist the temptation to cram as many questions as possible onto a page. Also, do not put coding instructions or numbers on the questionnaire. It will re-inforce the respondent's feeling that he/she is "just another statistic plugged into the computer."

- Use different sizes of type for questions and for answers. Dillman (1978: 133) recommends lower case letters for questions (they are easy to read) and upper case for answers (they stand out). See examples in Section 2 of this module.
- Don't run questions on two pages
- Provide headings and transitions to explain the flow of the questions (see discussion in Section 2.3.)

A third aspect of packaging is that the respondent's name and address should be typed right on the envelope containing the questionnaire, covering letter and return envelope, rather than affixed with an address label. In all other respects the envelope should look like normal mail; the object is to avoid the appearance of junk mail.

Finally, a stamped self-addressed envelope should be enclosed to facilitate the return of the completed questionnaire.

Adequate follow-up is especially important to bolster response rates with mail surveys. This issue is discussed in Section 3.9.

3.6 Telephone surveys

Telephone surveys can be very effective if a quick survey is needed, and have many of the same advantages as face-to-face interviews. However, there are several issues specific to telephone surveys which should be considered.

3.6.1 Obtaining the sample

For telephone surveys it seems obvious that you obtain your sample from a telephone directory. Depending on circumstances, this may NOT be the best source. Telephone directories are not fool-proof as up-to-date residential lists for a given area because:

- 1) They are 3-4 months out of date when newly published, and over the year, many persons who are listed will have moved from the area. This attrition rate has been estimated at 11-14%. Other new listings will not yet be in the directory. Dillman (1978: 237) notes that U.S. census data suggests that movers tend to be younger and have more education than non-movers; persons without school-age children tend to move more than those with children; and divorce is a frequent factor in moves. All these factors contribute to potential bias if directories are used.
- 2) Some residents have two telephone numbers. One Mid-West U.S. Study found 3% were listed more than once. This problem could bias calls slightly in favour of professional occupations.
- 3) Some residents have no phones (roughly 3-5% in the U.S.).
- 4) Many residents have unlisted phone numbers. Frey (1983:62) cites several U.S. studies in which unlisted numbers and new listings ranged from 16 to 30 per cent of total numbers. He states that "those with unlisted numbers tend to be younger, have lower incomes, and live in urban areas. They are also non-white, non-joiners, renters and less educated."

You therefore should consider the target population of your survey before making your choice of sampling methods. Since population turnover and unlisted numbers are infrequent in rural areas, directories are more appropriate for rural populations. If you want to determine the needs or views of divorced, young and/or low income people in urban areas (often the target of PLEI programs) using a telephone directory may involve some biases.

An alternative to using telephone directories is random digit dialing. It is an attempt to overcome the problem of inadequate listings. The basic procedure is as follows:

- 1) identify all central office codes (COC's) for the area you are surveying. (COC's are the three-digit prefixes immediately in front of the last 4 digits. In the number 483-3802, the COC is 483). Do this by looking in the telephone directories and/or contacting the relevant telephone companies.

- 2) Use a table of random numbers to develop a list of 4 digit numbers for each of the exchanges. (See Section 3.3 for a discussion of random numbers sampling). Suppose you drew ten 4 digit numbers from a table of random numbers. If one of your COC's was 483, a sample list of random digit numbers to dial might be:

483-1009	483-6606
483-3754	483-3106
483-0842	483-8526
483-9901	483-6357
483-1280	483-7379

If your next COC was 993, you would draw a second list of 4 digit numbers from a random table, to use after the prefix.

If you have a large number of COC's (e.g. in a provincial study) you could first draw a sample of the COC's using random methods, and then draw a sample of four-digit numbers for each sampled COC. This is a form of cluster sampling, discussed in Section 3.3.

Although random digit dialing avoids the problem of incomplete or outdated listing, it has problems of its own:

- 1) Often whole blocks of numbers within COC's are not used. For example, in the 483 COC above, it is possible that all numbers from 483-5000 to 483-6000 have not been assigned. This is frequently the case in urban areas.
- 2) Many of the numbers are non-residential.
- 3) New COC's are sometimes added after the directories are published, so will not be included.

Improvements to overcome some of these problems have involved a combination of directory and random digit sampling. For example, one method starts with directory sampling. When all numbers are selected using random procedures, the last two digits of each number are dropped. Thus if one of the numbers selected randomly was 483-3802, the new base would be 483-38. You then select two-digit numbers from a

table of random numbers, and replace all the discarded digits with two new random digits. If the first two random digits were 10, the first new number would be 483-3810. Because this process starts with directory numbers, it is more likely to avoid commercial and unused banks of numbers. But it doesn't solve the problem of new banks being added after the directory is published. Other combination methods are described in Frey (1983: 68-77).

3.6.2 Simplifying questions for respondents and interviewers

Although telephone interviews are effective vehicles for asking simple close-ended or open-ended questions, they are less able than mailed questionnaires to accommodate complicated choice or rating questions.

EXAMPLE #36: SIMPLIFYING QUESTIONS FOR TELEPHONE INTERVIEWS				
<u>Mail version</u>				
[Question to public librarians involved with legal materials.]				
Below are listed some sources to which you might refer people if you cannot assist them with a legal information inquiry. Please indicate the relative frequency of such referrals by placing a tick in the appropriate column to the right of each item.				
	VERY FREQUENTLY	FREQUENTLY	INFREQUENTLY	NEVER
a) TO ANOTHER LIBRARY (SPECIFY): _____				
b) TO A LAWYER				
c) TO SPECIFIC GOVERNMENT DEPARTMENTS				
d) LEGAL AID OFFICE OR COMMUNITY LEGAL CLINIC				
e) MLA'S OR MP'S OFFICE				
f) LAWYER REFERRAL SERVICE				
g) OTHER (SPECIFY): _____ _____				

Telephone version

I am going to read to you seven sources to which you may refer people if you cannot assist them with a legal information inquiry. For each source I read, I'd like you to tell me how frequently you make such referrals. The choices will be VERY FREQUENTLY, FREQUENTLY, INFREQUENTLY, and NEVER

	VERY FREQUENTLY (1)	FREQUENTLY (2)	INFRE- QUENTLY (3)	NEVER (4)
The first of these sources is to another library. Do you refer people to another library very frequently, frequently, infrequently or never?	1	2	3	4
To which library or libraries do you make these referrals? (write here) _____				
The second of these sources is to a lawyer. Do you do this VERY FREQUENTLY, FREQUENTLY, INFREQUENTLY, or NEVER?	1	2	3	4
[Interviewer: From here on, repeat the categories only if you think it is necessary.]				
The next source is: <u>To specific government departments</u>	1	2	3	4
The next is: <u>to a legal aid office or community legal clinic</u>	1	2	3	4
Next: <u>to MLA's or MP's office</u>	1	2	3	4
Next: <u>lawyer referral service</u>	1	2	3	4
Finally, can you tell me any other source of referral which I haven't mentioned? (Write here) _____				
And how frequently do you refer to that source?	1	2	3	4

Question structure in telephone questionnaires should be designed so that it is easy for the interviewer to ask the question, the respondent to understand it, and the interviewer to record the answer. Example #36 shows how the mail version of a relatively complicated question would be revised for a telephone interview.

The telephone version in this example helps the respondent in that it is slightly more repetitive in its instructions (e.g. repeating the sources and the graded responses). It is also more personal (use of "I" and "you"). It uses transition words like "the first of these sources", "the second....", "next" and "finally". These phrases help the respondent follow the flow of the questions.

The interviewer is trying to do three things at once: ask the questions accurately, ask them in a natural way in order to keep the respondent interested and relaxed, and record the answers. The telephone version of the question helps all 3 tasks. The questions are written in exactly the way they will be asked. Instructions to the interviewer are in upper case type for quick recognition. Similarly, words that require emphasis or which represent choices are either underlined or in upper case. These cues help provide a natural flow and emphasis. Finally, the dots lead from the question directly to the answer choices, and the numbered answer choices are small and easy to circle. (They would also correspond to the number codes on the computer cards or hand-tallied coding sheets for eventual data recording and analysis).

We have already discussed screen questions in Section 2.3 and the importance to the respondent of easy-to-follow answers and indentations. Rather than repeat the examples here, we would just point out that the use of arrows, screen instructions and question indentations is also imperative for the telephone interviewer. He or she has to be able to navigate the question order even more efficiently than a respondent who has time to study a mail questionnaire.

3.6.3 Precoding questionnaires

In the discussion of mail surveys we advised that you not put computer codes on the questionnaire itself. This was because the appearance and tone of the questionnaire should be personal and interesting rather than bureaucratic. With telephone surveys, this is not an issue, as the respondent does not see the questionnaire. Where possible, you should make the questionnaire convenient not only to the interviewer, but also to the person who will have to transfer the answers to a hand-tallied sheet or computer cards.

Whether you are hand-tallying responses or using a computer, it is essential that the questionnaire be reviewed in advance by the person who will be coding the responses and/or doing the data analysis. There are several ways you can make life easier for the coder, without making it harder for the interviewer:

- Use circled numbers rather than words or ticks for any close-ended response categories.
- The choice numbers should be the same as the number you will record on your tally sheet or computer cards (e.g. 1, 2, 3, 4, etc).
- Certain numbers are usually reserved for certain answers. For example, Dillman (1978: 222-225) uses 7 for "does not apply", 8 for "I don't know" and 9 for "refusal". He also uses lower numbers for negative responses and higher numbers for positive responses (e.g. 1="no"; 2="yes"; 1="disagree", 2="agree" etc.) The same applies to graded questions (e.g. very dissatisfied = 1, dissatisfied = 2, neutral = 3, fairly satisfied = 4, very satisfied = 5). Other systems reserve 9 for "I don't know". The important point is that your questionnaire be consistent, as an aide both for the interviewer and coder.
- Put precoded response categories on the right of the page. This is an easier location for the coder and data analyst. It's also easier for the interviewers to rest their hand on one side of the page, and avoid covering up the question they're asking!

3.6.4. Advance letters

Dillman (1978: 243-248) reports that in cases where groups are surveying the general public, it has been shown to be effective to send

a letter in advance of the call. This is to reduce the element of surprise, and the natural skepticism that many persons have about any form of telephone solicitation. The intent of the letter is to inform the person of the impending call, explain briefly what the study is about, how long the call will take, and to solicit their cooperation.

Obviously an advance letter is not possible if you are using random digit dialing. It may also not be practical from a cost or time standpoint, if you are conducting a large survey. The value of an advance letter also depends on your target group. If you anticipate difficulties convincing callers that it is worth their time to offer their opinion, then an advance letter may be important. This is more likely the case with a survey of the general public. If you are telephone surveying a specific public -- e.g. social workers or other professionals dealing with youths, you can anticipate a good response rate. We have done telephone surveys without advance letters of people who have had divorces; we had little trouble completing interviews with them about their court and legal aid experiences. Even though the issue was sensitive, it was of interest and relevance to the respondents.

3.7 Face-to-face interviews (for surveys and other purposes)

A glance back at Table 9 (page 182) reveals several of the major problems associated with surveys using face-to-face interviews. They cost more money and take more time than either telephone or mail surveys. This is especially true if your survey covers a large geographic area (e.g. a province or region). Travel and return trips (if people are not home) can consume a lot of time and mileage. Face-to-face interviews are dependent on skilled or well-trained interviewers, both to win the confidence of the respondents and to record responses fully, accurately and in an unbiased manner.

There are also advantages to this method. Travel costs are not always a major factor. Surveys using face-to-face interviewers are often advisable in a small town or in city neighbourhoods (if, for example, your

program is targetting a specific group). If respondents actually meet the interviewer in person, they are more likely to be interested in giving information. (In fact, increased interest in the program itself is often a by-product of a survey, especially if it involves face-to-face interviews. There is nothing wrong with having a community development purpose accompanying your research purposes, as long as you and the respondent are clear about your primary goal. The interview questionnaire may end with questions asking if the respondent desires more information about the program, or wishes to volunteer time in some capacity.)

The primary advantage of surveys using face-to-face interviews is that they have more scope than either mail or telephone surveys. This can be seen in relation to Table 11. For surveys of the general public,

TABLE 11: TYPES OF INTERVIEW APPROACHES

<u>Type</u>	<u>Characteristics</u>
1) <u>Closed quantitative</u>	- exclusive use of close-ended questions
2) <u>Standardized, open-ended</u>	- questions are standardized and the sequence of questions fixed in advance, but responses can be open-ended and involve "probes" by the interviewer.
3) <u>Interview guide/exploratory approach</u>	- topics and issues to be covered are determined in advance but only in outline form; the interviewer decides the wording, order and extent of questions as the interview develops.
4) <u>Informal, conversational interview</u>	- there is no predetermination of question topics; typically involves series of interviews; questions arise out of the context (e.g. participant observation fieldwork).

(Adapted from Patton 1982: 167-168)

face-to-face interviewing would normally involve the first or second approach listed in the table. The advantages of face-to-face interviewing in surveys are more fully realized in the second approach. In a mail questionnaire, if the respondent fails to answer an open-ended question or provides a 1 or 2 word response, you are left with little data. In a face-to-face interview (and to a lesser extent in telephone interviews) the interviewer can "read" the respondent and probe for a fuller response. These skills are discussed later in this section and in section 3.8.

Interview guides are most appropriate for what are commonly called "exploratory interviews". In general terms, exploratory interviews are more geared to defining issues, problems and needs than to generating statistics or comparative data on particular questions. They are often a useful approach for gathering information from professionals and other intermediaries rather than from the general public. They are helpful if you know the types of issues you are concerned about, but are not certain if respondents will have awareness of them. Your respondents may be from different backgrounds and their value to your study will vary from issue to issue. You may want the freedom to explore side issues that arise with a particular respondent, without the constraint of a set interview format.

We have most frequently used this approach with needs assessment surveys (both face-to-face and by telephone) and case studies. If your group is genuinely exploring PLEI needs, it will find a set interview format too limiting. Sometimes a small survey using an exploratory approach with selected respondents will serve as a basis to define questions for a larger, more quantitative needs assessment survey of the general public. A portion of an interview guide for a project serving the legal needs of farmworkers is shown in example 37.

EXAMPLE 37: PORTION OF AN INTERVIEW GUIDE CONCERNING PLEI FOR FARMWORKERS

c. Public Information Service

1. What are the information needs of various farmworker groups, vis-a-vis legal issues and rights?
2. What problems are encountered with communicating with diverse ethnic communities (e.g. Quebecois, East Indian, and Chinese). Specifically, how effective is the presentation of legal information in various formats (e.g. magazines, posters, brochures, radio/T.V., newspaper).
3. To what extent are communication problems created by inter and intra cultural conflict; medium of presentation; literacy problems; inadequate access to workplace?
4. How do the client groups perceive information sources (e.g., are there differences in the perceived credibility of government vs. community vs. information programs?)
5. Is there a need to train community members to deliver some aspect of legal services? If there is a need for community members to become competent in some aspects of the project work, what resources will be required to facilitate necessary training?

The fourth interview approach (i.e. informal or conversational) is not a survey method; like exploratory interviews, this approach is useful for defining issues and describing organizations. Interview questions are spontaneous. They arise out of the natural interaction between the interviewer and the respondent. Sometimes the respondent will not even know he/she is being interviewed. This does not mean the respondent is being "tricked", because he/she is usually aware that the person is gathering information related to the program. But this gathering of information is often done over a period of time, and will involve several visits which feel quite natural to the respondent.

Although evaluation information related to PLEI programs is frequently gathered in an informal way, we are unaware of instances in which an informal conversational interview style has been systematically used as a

method of data collection. We feel that it could be effective to assess the impact of a community PLEI project such as native community theatre in the North West Territories, where there was a high degree of interaction between the PLEI acting group and the community. Similarly, in organizations such as the Downtown Eastside Residents Association in Vancouver, public legal education is really part of a larger community development focus. There is less separation between community development workers and their "target groups" than there is between PLEI lecturers in public forums and their audience. The method of interviewing should reflect this difference in program style. By adopting a low key approach with community development target groups, the interviewer is less likely to antagonize them (they are often highly suspicious of anyone that seems bureaucratic or formal) and is more likely to obtain useful evaluation information.

3.7.1. Interviewer skills

Although many of the skills required for face-to-face interviews are the same as for telephone interviews, face-to-face interviewers often work under less supervision than telephone interviewers. Their skill requirements tend to be more complicated. We deal with these issues in Section 3.8.

3.7.2. Tape recording interviews

If you wish to tape record an interview, you should get permission from the respondent to do so, and explain the purpose of recording the interview. You should also make it clear that the tape recorder can be turned off at any point at the interviewee's request. But before making a decision to tape record, consider the advantages and disadvantages in Table 12.

TABLE 12: ADVANTAGES AND DISADVANTAGES OF TAPE RECORDING INTERVIEWS

<u>Advantages</u>	<u>Disadvantages</u>
1. It produces an accurate record of the interview 2. It is especially useful for obtaining quotes 3. It allows a more natural, conversational tone to an interview 4. It allows a natural momentum to develop in group interviews or discussions	1. It makes some interviewees nervous. They become awkward and/or hold back information 2. Tape recorder can malfunction 3. Background noise sometimes obliterates portions of interviews 4. Transcribing can be expensive and time-consuming

When tape recording an interview it is useful to take notes. They are a way of highlighting points in the interview (they act like a table of contents), so that you can quickly locate a conversation on the tape. (If you intend to have the interview transcribed, you could save money by transcribing only the highlighted items). Notes are also a way of formulating new questions or "probes" in response to something the interviewee has said.

3.8. Training interviewers

Unlike mail surveys, telephone and face-to-face surveys require either skilled interviewers, or persons who can be trained. Since telephone surveys are often done out of a central office, it is easier to supervise interviewers and assist in the correction of problems. Face-to-face interviewers are often on their own for larger periods of time and therefore need to be experienced.

3.8.1 Skills and qualities required of interviewers

The basic skills required of telephone and face-to-face interviewers are outlined in Table 13.

TABLE 13: SKILLS AND QUALITIES REQUIRED OF INTERVIEWERS	
<u>Telephone</u>	<u>Face-to-face</u>
1. have a good voice	1. be able to locate sample households
2. have fluent reading ability	2. be able to handle expense accounts
3. be able to operate telephone	3. be able to plan own day
	4. have a suitable appearance
<u>Both</u>	
1. be able to establish rapport with respondents	
2. know how to ask probes and ask follow-up questions.	
3. be able to record answers accurately and completely, and take notes	
4. be able to maintain control of interview	
5. be able to complete call record	
6. be able to "edit" the questionnaire after the interview for accuracy and quality	

Most telephone skills are obvious and/or readily ascertained. It is helpful to talk to a potential telephone interviewer on the phone to judge how he/she sounds. Some voices are jarring and impede the flow of the interview. Others are too soft to be heard, especially if there is

background noise. An interviewer's reading of questions should not be monotonous or routine or sound like a sales pitch.

Face-to-face interviewers have to understand the sampling procedures they will use, and the rationale behind them. For example, some apartments have only seniors or only children on the ground floor, or certain-sized units are in certain locations (e.g. corners). By sampling every fourth apartment, an interviewer may get a skewed sample. The interviewers must know what procedures they will use in these circumstances, and what they will do in terms of substitution or call-backs if residents are not home.

Face-to-face interviewers usually have more administrative functions. They plan their own day, and maintain accounts of mileage, meals and other expenses. They also have to know when to contact a supervisor if they are unsure of a procedure or an appropriate decision. They should be sensitive to the lifestyle of the average individuals they will be interviewing, and dress accordingly.

Many skills are common to both telephone and face-to-face interviewers. Interviewers must be able to establish rapport with the respondent. This is especially important at the outset, when the respondent is deciding whether to provide an interview or not. The interviewers must be able to provide reasonable, honest and reassuring answers to objections the respondent might raise (see Example 38). It helps to do this in a personable but nonetheless respectful manner. Interviewers should also have knowledge of the objective of the study, know who is involved, and know who will likely use the study. They should also know to whom they can direct the respondent for more detailed questions.

During the interview itself, a number of other skills come into play. The interviewer is trying to balance four objectives:

- maintain a rapport with the respondent
- remain neutral
- encourage answers which are full and complete
- maintain control of the interview

EXAMPLE 38: ANSWERS FOR RELUCTANT RESPONDENTS

These are sample responses interviewers might make if a respondent is reluctant about giving an interview, but might waver with some frank but personable persuasion. Never push too much, as it is better to lose an interview and have treated the respondent with respect, than to make a respondent hostile.

1. "DON'T KNOW ENOUGH"

Respondent: "I just don't know anything about the law and stuff like that. I don't think I can help you."

Interviewer: "Actually, it's just as important for us to find out things people don't know or are not sure about. There's really no right or wrong in an interview like this. Your opinion is just as valuable as anybody's else's."

2. "TOO OLD"

Respondent: "I'm afraid I'm too old for this sort of thing."

Interviewer: (With a touch of humour, but be respectful), "Oh, I'm not so sure about that -- they say that age makes you wiser and I'm sure you're no exception. Seriously though, we do have a number of programs servicing seniors, so your opinions are really important us to make our programming better."

3. "NOT INTERESTED"

Respondent: "I'm just not interested, thank-you".

Interviewer: Would you mind if I explained one more thing before you make a final decision? In doing a survey of this type, we expect to talk to a variety of people, from those who are really enthusiastic to those who aren't interested at all, but a full range of opinions is important to us, and even if legal issues don't touch you directly, you may have some observations that might help our service for other people, even people you know."

4. "NONE OF YOUR BUSINESS"

Respondent: "It's none of your business what I think"

Interviewer: "Oh, I can sympathize that you might not want everybody to know what you feel about a matter like this, but all individual opinions or identities are kept strictly confidential. (If true). Your name will not even appear on the questionnaire that I am completing."

5. "NO TIME/TOO BUSY"

Respondent: "I'm sorry, I don't have any time/ I'm just too busy right now."

Interviewer: "Sure, I realize that dinner-time/evenings is a hectic time for a lot of people. Could I set up another time to phone you when you won't be under so much pressure? The interview usually takes only 10 minutes (or actual time) to complete."

6. "DON'T LIKE SURVEYS"

Respondent: "I'm tired of answering surveys. I just don't like them."

Interviewer: "I can sympathize -- I get a lot of calls at night myself. I usually hang up if somebody's selling something. But this is the first major survey that the Public Legal Information Association has had, and you may find it interesting. I know we'd find your opinions useful."

Sometimes these objectives are in tension with each other. For example, if the respondent misconstrues the question and starts to provide a detailed answer that is off the mark, don't sacrifice a complete answer for fear of hurting the respondent's feelings. You can show respect while steering the respondent back to the original question, as in Example 39.

EXAMPLE 39: REDIRECTING RESPONDENT WHEN QUESTION IS MISUNDERSTOOD
--

<u>Interviewer:</u> Can you describe ways in which you found the conference useful to you personally or in your work?
--

<u>Respondent:</u> Well, I really found the workshop called "The Victim's Perspective" interesting. The speaker was very dynamic. I had never realized how seldom most victims even appear in court.

<u>Interviewer:</u> Has this realization been of use, for example, in the way you deal with clients in your counselling practice? Do you do or say anything differently than you did before?

In this example the respondent described a particular part of the workshop he found interesting, but did not answer the point of the question, which concerned usefulness. The interviewer maintains rapport with the respondent by building on his "realization" and directs the respondent back to the concept of "usefulness".

In exploratory interviews (See Section 3.7.) a respondent will sometimes go on at length in response to a question, providing interesting but irrelevant information. An inexperienced interviewer may feel entertained, only later to discover that he/she lost control of the interview and didn't get answers which dealt with his/her questions. The interviewer must consistently be aware not only of answers to individual questions, but also of the general flow of the interview. If requestioning as in the previous example doesn't work, you may have to use more direct but nonetheless respectful approaches, as in Example 40.

EXAMPLE 40: MAINTAINING CONTROL OF THE INTERVIEW: SOME CUES

1. "Let's just stop here a minute and go back to my original question, because you may still have some more thoughts on it."
2. "I'd like to stop you for a second and go back to one of your earlier comments."
3. "Okay, just to let you know where we're at with the interview we're about 1/4 of the way through, and I want your opinions on quite a few more of the issues, so perhaps we should move on. Just to make sure I don't keep you too long, I may break in at points when you're answering if I think I've got enough information on each question."

Sometimes the interviewer has to encourage the respondent to elaborate on an answer. It is important to do this in as neutral a way as possible while expressing interest in the respondent's ideas. Example 41 suggests some interviewer responses.

EXAMPLE 41: PROBES TO ENCOURAGE A RESPONDENT TO ELABORATE AN ANSWER

1. "Uh-huh" (on a slightly rising tone, as if you expect them to say more)
2. "Can you expand (elaborate) on that?"
3. "I'm not sure what it was that you found boring about the workshop ... was it the content of the lecture, the speaker's delivery, or the materials which were handed out ... or something else?"
4. "I understand the general point you are making, but it would be really helpful if you could give me a couple of examples."
5. "You say the booklet was one of the better ones you've seen. Can you compare it with some others to give me a clearer idea of how it is better?"
6. "You say you went to the workshop because both you and other tenants have had hassles over the past few years. Could you be more specific? What were the hassles? What did you do about them? What was the result?"

Often obtaining elaboration of an answer is just a matter of asking who? what? where? when? and why? questions, as in Example 42.

EXAMPLE 42: SIMPLE PROBES TO FILL IN DETAILS

1. With whom did you go to the workshop?
2. How many trainees would you say felt the same as you on that point?
3. What were the dates of those performances?
4. For how long were you involved as a volunteer?
5. Can you explain how that happened?
6. And where were you when the coordinator called?

A final set of interviewer cues are support statements. Just as you may have to gently shift a long-winded respondent back on track, you also have to give support and feedback to respondents that are on track. This does not mean you are asking for "right" answers, but simply that you appreciate their providing information that is a response to the question

EXAMPLE 43: INTERVIEWER STATEMENTS OF SUPPORT

1. "You've really grasped the essence of each of my questions."
2. "I really appreciate the thought you're giving to these questions."
3. "That was a helpful perception."
4. "You made several points there that were a great help to me in interpreting the trainer's reaction. Is there anything you'd like to add in regard to follow-up by the coordinator?"
5. "You've stated your views on that very clearly ..."
6. "I appreciate your expressing your feelings about that issue so frankly."

you are asking. Apart from the verbal cues in Example 43, there are also the obvious but sometimes overlooked, non-verbal cues such as nodding your head, taking notes, and leaning forward.

3.8.2 Call records

Interviewers must complete a record of each contact made with the respondent's household. Example 44 shows a telephone call record; a

EXAMPLE 44: EXAMPLE OF COVER PAGE WITH CALL RECORD				
B.C. PUBLIC LEGAL INFORMATION SERVICE CLIENT SURVEY Respondent's Name _____ Phone Number _____ Street _____ City _____ Hello, may I speak to (respondent's name?). (If WRONG NUMBER, apologize and terminate call.) (IF RESPONDENT NOT HOME, obtain a convenient call back time and complete call record). Hello, my name is _____. When you attended a workshop sponsored by the B.C. Public Legal Information Service in <u>(city)</u> last <u>(month)</u>, you agreed to participate in a client satisfaction survey. I'm calling you now as part of the survey. The interview will take about 15 minutes to complete. Is this a convenient time for an interview or could you suggest a better time?				
DATE	TIME	INTERVIEWER	RESULT	CALL BACK ARRANGEMENTS
<u>Abbreviations</u> NA = no answer NH = not home WN = wrong number NS = number not in service Ref = refused C = interview completed PC = interview partially completed <u>Call back arrangements</u> Note time and identify who made arrangement (i.e. respondent, child, spouse, friend).				

similar record would be necessary for surveys using face-to-face interviews.

3.8.3. Editing the questionnaire

It is tempting after an interview to rush on to the next call or to the next house so you meet your "quota" for the day. But for both quantitative and qualitative (more open-ended) interviews, it is important to "edit" or go over the questionnaire immediately after the interview. For qualitative interviews, the interviewer will want to ensure that all questions were asked, that close-ended answers have been circled, and that answers for open-ended questions are legible. He/she should also check to see that the responses to open-ended questions are not ambiguous or vague and that they comprise a complete record of the response. Although slightly embarrassing, it is much easier for the interviewer to go back to a house or repeat a call within 10 minutes of the original interview, than it is to get back several hours or a day later. The chance of remaking contact is high, there is still a rapport between interviewer and respondent, and the interview is fresh in both their minds.

3.8.4. Training approaches

Interviewers should either be experienced or trainable. Since many PLEI surveys are conducted using students funded under summer grants, training is likely to be a factor in your survey planning.

Training should address the following items:

- framework of the survey
- procedures to be followed
- skills and qualities important to successful interviewing.

The trainee should be familiar with the overall purpose of the survey, the particular issues which most influence the information being gathered, and the exact intent of each question. Without this framework, it will be difficult for the interviewers to ensure that they are gathering relevant information, much less to answer respondent questions.

There are numerous procedures or rules which the trainee will have to learn depending on the size and type (telephone or face-to-face) of survey. They include:

- What to say in response to particular questions (e.g. "Who is 'behind' the survey?" "Is it confidential?"; "How did you get my number?", "Can I get a copy of the results?"
- When to refer a respondent to the survey coordinator for further answers.
- How to fill out the questionnaire
- Editing the questionnaire (see previous section)
- Maintaining confidentiality
- Sampling procedures (for face-to-face interviewers)
- Call back (follow-up) procedures if respondent is not home.
- Completing the call record
- Recording hours
- Recording travel, food and lodging expenses (face-to-face interviews, if on the road).

The final and perhaps most crucial aspect of training for inexperienced interviewers concerns the development of skills identified in previous sections. These include:

- Establishing rapport and overcoming initial objections
- Answering respondent questions
- Remaining neutral
- Probing for fuller answers
- Maintaining control over the interview

The most comprehensive approach for developing these skills is a combination of observation, role playing and supervision during actual interviews. Dillman (1978: 263-268) uses four gradations of practice interviews for large scale (state or nation-wide) surveys:

- 1) The trainees observe two experienced interviewers role-playing interviews. The "respondent" presents typical problems to the "interviewer" (e.g. garbled answers, off-the-mark responses, long-windedness, "I don't know's"). The interviewer makes some errors. All this is fodder for post role-playing analysis.
- 2) Two trainees role-play "interviewer" and "respondent". This helps the trainees familiarize themselves with the questionnaire, as well as put themselves in the shoes of the respondent.
- 3) The trainee interviews a trainer or the supervisor. The latter makes the interview as difficult as possible.
- 4) The trainee interviews real-life respondents as part of the survey pretest.

It is unlikely that many PLEI organizations will have staff with a lot of experience in training interviewers, but you may have staff who have interview experience themselves. External assistance may be obtainable from university departments such as Psychology, Sociology, Social Work and Criminology. If this is not possible, but you do have some experienced interviewers, you could do modified versions of the four steps identified above. Interviews using quantitative questionnaires (primarily close-ended questions) will seem relatively easy if your role-playing has been intense and difficult. Respondents are seldom as nasty or obtuse as are the trainers in role-plays. This is also true of qualitative interviewing (i.e. with more open-ended questions), but because there are more skills to master, it is

important that the supervisor do ongoing checks of the interviewers' questionnaires to make sure that the quality of data remains high.

3.9 Follow-up (call-back) procedures

A respondent does not return a mail questionnaire. Nobody answers the phone in a telephone survey. Nobody is home on a face-to-face survey.

Dealing with "no contacts" is vital to ensure an adequate response rate in any type of survey, but especially with mail questionnaires where initial response rates are often low.

3.9.1. For mail surveys

If you intend to make follow-up contacts on mail surveys, you need to put identity codes on the front of each questionnaire and keep a log-book or similar record of whom questionnaires were sent to and from whom you have received completed questionnaires. How many follow up letters you send depends on your finances, your time, and your desired response rates. Dillman (1978: 183-191) sends those follow-up letters:

- 1) after 1 week: A postcard reminder to everyone (a thank-you to those who have replied and a reminder to those who haven't.)
- 2) after 3 weeks: a letter and replacement questionnaire sent to persons who have not responded. The covering letter is similar to the original covering letter (see sample in Section 3.5) but says that the questionnaire has not been received, and appeals for its return.
- 3) after 7 weeks: similar to the second follow-up, but by certified mail, and again enclosing a replacement questionnaire.

From studies of surveys using his methods, Dillman states that response rates have been about 19-27 percent prior to receipt of the postcard follow-up. The post-card boosted responses a further 15-25 percent. The second letter brought response rates up to around 59 percent. The final, certified letter, raised the responses from 59 up to over 72 percent.

These response rates demonstrate that PLEI groups don't have to accept low response rates and say they were "OK considering it was a mail survey." However, if you only have funds for a small or short project, you may elect to choose only the first and/or second form of follow-up. Follow-ups don't have to be by mail. If your target population is not the general public but rather comes from a PLEI mailing list or a list of professionals (ie. social workers), you could telephone a reminder. We have boosted returns on a mail questionnaire to legal aid offices about 25% over initial returns with a telephone reminder. You could also do follow-up interviews (rather than just reminders) by telephone or face-to-face. This decision would depend on the size and area of your survey, your staff skills, and administrative factors such as time and funds.

3.9.2. For telephone and face-to-face surveys

With both telephone and face-to-face surveys, it is necessary to maintain records of your original contact as a basis for follow-ups. These records should indicate both the date and time of the first contact. If a contact was made, but the desired respondent was not home, the contact record should indicate when the respondent will be home and whether any specific call-back arrangements were made (see example 40). If nobody was at home, then the follow-up contacts should be made on different days or hours from those of the original contact.

You should follow-up your entire list of un-contacted respondents rather than just a portion of it, so that all respondents have an equal chance of being re-contacted. Especially with face-to-face surveys it is sometimes tempting just to follow-up those respondents who are easiest to reach.

Follow-ups of telephone interviews need not only be done by telephone. You can use mail questionnaires, with an appropriate covering letter explaining the study and saying that contacts were attempted, but nobody was home. Similarly, follow-ups of face-to-face surveys can be by telephone or by mail (either left in the mailbox at the time of the original contact, or mailed subsequently). As long as the actual questions are the same, it is acceptable to interchange data collection methods on follow-ups. In fact, changing methods may be a way of reducing biases in cases where respondents object to one or the other method (e.g. elderly people or single women may be afraid of admitting a face-to-face interviewer to their home, but be quite willing to answer a mail questionnaire).

4.0 OBSERVATION

4.1 When to use observation to gather data

In situations where motives, attitudes, beliefs and values direct much, if not most of human activity, the most sophisticated instrumentation we possess is still the careful observer--the human being who can watch, see, listen, question, probe and finally analyze and organize his direct experience. (Guba and Lincoln, 1981, p. 23).

Observation, the collection of data by witnessing it, is an important evaluation method. It can be useful if you are reviewing an aspect of your organization or doing a large scale evaluation. Skilled observation can give you information on issues like the following:

- How staff make decisions
- The planning process in your organization
- The degree to which program participants become involved in your program.
- The different roles of individuals in a group
- The PLEI information that program participants are seeking
- The effectiveness of those presenting PLEI material

Observation can provide information about four major aspects of programs:

- THE PROGRAM SETTING - observation can provide data on the physical environment in which a program occurs (a courtroom, classroom or puppet tent). Often the physical environment influences the program's success. For example, where would elementary school children be more receptive to a law education program -- in a judge's chambers or at a puppet show? What would the environment suggest to the child?
- THE SOCIAL ENVIRONMENT - observation can provide data on the way people organize into groups, what their patterns of interaction are and how they make decisions.

There was a lot of dissatisfaction in one PLEI organization which nobody could (or would) put their finger on. A trained observer attended a number of staff meetings and was able to collect data on the way the group was interacting. It became clear that two staff members were monopolizing the conversation and thwarting decision making. This was fed back to the coordinator who talked to the staff people and developed some ways of encouraging others to speak out on issues.

- PROGRAM ACTIVITIES - observation can provide data on what people actually do in programs. How do they experience, for example, a law forum? What are the units of activity in a class session? What was said? Who was involved? What happens at the beginning, middle and end? This may appear to be pretty basic stuff but there are MANY instances where programs don't meet their goals or do what they say they will.

In one rural law program facilitators were expected to encourage group participation and discussion around law issues. By observing a number of the sessions the evaluator concluded that most facilitators were simply presenting the material. They didn't have the skills to involve participants. When this was fed back to the coordinator she developed a training program for these facilitators so they could change their approach.

- **INFORMAL INTERACTIONS/UNPLANNED ACTIVITIES** - observers can also collect data on how unstructured time is used. What happens during the coffee break? Who leaves a law reform program with whom? Do all the questions arise after the crown prosecutor has left?

Observation can also provide data on **INDIVIDUAL** characteristics (sex, race, age) if they are important; **NON-VERBAL ISSUES** (e.g. whether people are nervous, anxious, bored or disinterested); **PROPS** (things people surround themselves with -- like pictures, momentos, trophies, degrees, etc.); and **UNOBTUSIVE MEASURES** (numbers of cigarette butts left in ashtrays after meetings, well-worn books on an administrator's shelf). All of these clues may mean something about a program, its staff and participants to a skilled observer.

4.2 Advantages and disadvantages of observation

Like most other evaluation methods, observation has its strengths and limitations (summarized in the table below). However, there are some data that can only be gathered by observation.

TABLE 14: ADVANTAGES AND DISADVANTAGES OF OBSERVATION	
Advantages	Disadvantages
Observation allows the evaluator to see the program as it occurs. Observation interferes less in a program than do other methods (e.g. questionnaires). Staff may prefer the use of observation -- feeling it more accurately reflects WHAT REALLY HAPPENS in the program. Observation is more holistic -- it can consider a wider variety of data at one time.	People may act unnaturally if they know they are being observed (although this may not occur as much as people think.) Most types of observation require some training or skills. Observation takes time. Observation is usually restricted to small groups. It can't be used to collect data about a large number of people. Observation is open to the bias of the observer who may discount certain events or emphasize others.

4.3 What makes a good observer

Observation skills are usually developed with practice and over time. Many of the qualities which make a good interviewer apply to those doing observations:

- an interest or expertise in the matter being observed
- an ability to notice detail
- a non-judgemental manner
- appreciative, friendly manner
- an ability to establish trust with those being observed

Those who are beginning to use observation to gather data should focus their observations on a limited number of topics and use the techniques described in this section to categorize the data.

4.4 Types of Observation

There are two main types of observers. The PARTICIPANT OBSERVER is a person who observes and is involved in the program at the same time. This may be, for example, a staff member who attends a staff meeting, or a participant in a law forum. A participant observer may be more able to understand the program by being part of it. A NON-PARTICIPANT OBSERVER does not become involved in the program and may be more objective. In either case those being observed may or may not know they are being observed.

There are also several ways in which observation can be carried out. The observation can be continuous, or take place over a period of time (e.g. the continuous observation of a three-day PLEI workshop for librarians).

When the evaluator chooses activities or events that can be observed and attends only these (e.g. a sampling of law classes given by a PLEI organization, or a series of staff meetings), this is called EVENT SAMPLING. Similarly, when the evaluator observes a series of events during specific time periods (either random or specified), this is said to be TIME SAMPLING. For example, it might not be feasible to observe an all day law forum, but one hour segments could be observed in the morning, afternoon and evening. Time samples are less reliable because they lack continuity.

The method of sampling should grow out of the nature of the problem being investigated. For example, if observations are to be conducted to determine how staff in an operating agency spend their time, time sampling should be used because it would provide a picture of staff time/task allocation during a typical week. If, however, the problems of communication in an agency were studied, event sampling would be more appropriate because it would allow the investigator to select for observation those activities related to agency communication on policies and procedures. (U.S. Dept. of Housing and Urban Development, 1976: 49).

4.5 Methods of recording and analyzing the data

There are two main ways of recording data acquired through observation. One is through an unstructured format, in other words through descriptive "field notes." If more structured formats are used (rating scales, checklists, maps, etc.), a combination of recording techniques may be appropriate.

4.5.1 Unstructured methods. Data acquired through observation are often recorded by field notes. The observer writes down what s/he sees -- the setting, people involved, what they said and did, their reactions, and so forth. The notes can be free-flowing or can be organized into themes. For example, if observing a staff meeting, the observer may make notes on the following themes:

- planning the agenda
- physical setting
- people present
- discussions around termination of program
- discussion about new worker to be hired
- funding discussion

Usually the organization of the notes into "themes" requires sufficient understanding of the setting beforehand to allow the themes to be determined. By using themes, the observer can discard extraneous material.

It is usually impossible to take a comprehensive set of notes during an observation. After the observation is finished it is necessary to review the notes and "flesh them out." Sometimes this process takes far longer than the original observation.

Observations can be recorded electronically, through video tape, tape recordings, or films. They offer a permanent record for the observer and for the observed. This can be useful if the activity is very significant or if the interpretation might be questioned later.

Sometimes those being observed do not feel comfortable being recorded. Although using a tape recorder appears at the beginning to "save time," the analysis of the material can take hours of work. Transcription into typewritten notes can also be expensive.

4.5.2 Structured methods. Because the amount of data available is often overwhelming, it is useful to record the amount, type and frequency of data in a structured format. The following methods are commonly used to record data.

A. CHRONOLOGS - One way of organizing data is through a time sequence (chronolog). Activities or events are recorded in sequence in the form of episodes. A review of the episodes might reveal something about the frequency of activities within an office and the need for some reorganization.

EXAMPLE 45: CHRONOLOG OF THE FIRST HOUR OF A DAY IN THE LIFE OF A
PLEI PROGRAM DIRECTOR

1.	8:15	Director arrives at work
2.	8:16	Mail
3.	8:20	Telephone call from board member re: AGM
4.	8:25	Telephone call from Native Rights Coordinator re: land claims brochures
5.	8:35	Staff meeting begins
6.	8:36	Agenda discussed
7.	8:38	Telephone call from Attorney-General's office re: meeting on July 2nd
8.	8:50	Telephone call from Ottawa re: funding
9.	8:57	Telephone call from printer re: posters
10.	9:10	Return to staff meeting
11.	9:12	Telephone call from board member re: Annual General Meeting

B. CONTEXT MAPS - These maps are sketches of the physical environment in which a program or activity takes place. They may be useful when the setting itself is an important factor in the program (for example, a workshop for the physically disabled, law activities for children). Notes can be made on the map, describing problems in the surroundings, position of people and so forth.

C. SOCIOMETRIC DIAGRAMS - These are diagrams which describe patterns of interactions (for example, who talks to whom in a staff meeting or what law displays are most frequently visited at a PLEI forum).

D. CHECKLISTS - Checklists are also useful to record the presence of behaviour, but they do not record the quality of an interaction. Categories are set up in advance and the observer checks them off when they occur.

EXAMPLE 46: A CHECKLIST TO MEASURE AREAS OF CONCERN OF FARMWORKERS AT A PLEI CONFERENCE ON FARMWORKERS AND THE LAW				
Area of Concern	No. of Questions Asked	Answered Completely	Answered in part	Not Answered
Human rights legislation Labour Code Pesticide Control Act UIC legislation Immigration Act Minimum wage legislation etc.				

Checklists are often useful when used with groups who would not be comfortable filling out questionnaires themselves (e.g. children, mentally disabled people, illiterate people or those with a poor grasp of English).

E. RATING SCALES - These consist of a number of items which the observer rates according to a prescribed scale. Because the same scale can be applied to similar events they can be compared. A disadvantage of this method is that the observer may be biased or uninterpretive and this may affect the rating. For example an observer may tend to rate all law teachers as average, when in fact there are significant differences between them.

Rating scales are also effective tools when the participants are uncomfortable about filling out forms themselves.

EXAMPLE 47: A RATING SCALE USED TO EVALUATE THE PERFORMANCE OF LAWYERS PRESENTING LAW INFORMATION FOR A LAW SCHOOL

[The same observer attends one class given by each of the 25 lawyers and fills out these forms.]

Lawyer's name: _____

Date: _____

Observer: _____

On a scale of 1 to 5 (1 = POOR, 5 = EXCELLENT), please rate the lawyer's effectiveness in the law forum.

- | | | | | | |
|---|---|---|---|---|---|
| 1. Did the class start on time? | 1 | 2 | 3 | 4 | 5 |
| 2. How fully was the sponsor of the class described? | 1 | 2 | 3 | 4 | 5 |
| 3. Did the lawyer stick to the topic? | 1 | 2 | 3 | 4 | 5 |
| 4. Was the lawyer open to questions from the floor during the presentation? | 1 | 2 | 3 | 4 | 5 |
| 5. Was the topic discussed in layman's terms? | 1 | 2 | 3 | 4 | 5 |
| 6. Did the lawyer provide concrete examples of the law issue? | 1 | 2 | 3 | 4 | 5 |
| 7. Did the session end on time? | 1 | 2 | 3 | 4 | 5 |
| 8. Was the atmosphere in the room cordial and friendly? | 1 | 2 | 3 | 4 | 5 |

Rating scales are often used to assess employee performance. Categories such as quality of work or attitude can be noted on a rating scale which is filled out by the employee.

Rating scales do not necessarily use numbers. They can be more descriptive. For example, the following Employee Evaluation Form used by an Elizabeth Fry organization has a descriptive rating scale to look at a number of qualities such as job knowledge and creativity.

EXAMPLE 48: PART OF A SCALE FOR RATING EMPLOYEES

CREATIVITY

Rarely has a new idea; is unimaginative	Occasionally comes up with a new idea	Has average imagination and reasonable number of new ideas	Frequently suggests new ways of doing things, is very imaginative	Continually seeks new & better ways of doing things; is extremely imaginative
---	---------------------------------------	--	---	---

JOB KNOWLEDGE

Poorly informed about work duties	Lacks knowledge of phases of work	Moderately informed; can answer most common questions	Understands all phases of work	Has complete mastery of all phases of job
-----------------------------------	-----------------------------------	---	--------------------------------	---

This type of form can also be filled out by employees doing a self evaluation.

4.6 Reliability and validity of observational data

Observation frequently generates qualitative data, which is more subject to certain biases than is quantitative data (see MODULE V for a discussion of Qualitative Data Analysis). However, two checks can be made on data collected through observation which will increase the trustworthiness of the information:

- REVIEW your data and assess whether it seems plausible. Does it make sense in terms of human behaviour? Does it make sense within the context of the program and PLEI generally?
- Find at least two other sources of data which CONFIRM your observations. They may be other data acquired by observation, through interviews, and so forth.

Observation is often coupled with interviewing. Using several techniques heightens the trustworthiness of the information.

5.0 DOCUMENT ANALYSIS

5.1 When to use document analysis

The analysis of an organization's documents is a useful way to gather evaluation data or to develop questions for an evaluation. Document analysis is relevant for ALL TYPES of evaluations, from simple program reviews to large scale program evaluations. A document analysis can provide information about the background, purpose, goals, history and conflicts within an organization.

5.2 What is a document?

Documents are any written or visual materials which relate in some way to your organization. There are generally four types of documents produced by any organization. The degree to which your organization produces them depends primarily on its size and purpose. Most PLEI programs probably have some of the following:

● Official Program Records -- These may include:

- Society by-laws, rules, regulations
- Statements of goals and purposes
- Historical documents
- Minutes of meetings, committee reports
- Logs
- Client or target group records
- Distribution of materials records
- Organizational charts
- Workshop records
- Newsletters
- Annual reports
- Brochures
- Program literature
- Work reports, time sheets, official correspondence

- Personal records -- kept by staff, such as:

- Memos
- Scraphooks
- Photographs
- Logs
- Diaries
- Personal Correspondence

Some programs may also have the following types of records:

- Government records which relate to the program

- Government reports which include information about the program
- Census data which relate to the program
- Evaluations or management reviews carried out by funder or government personnel

- Outside reports which relate to the program

- Newspaper reports about the program
- Research analyses, doctoral dissertations, etc.

5.3 Advantages and disadvantages of document analysis

As a type of data gathering, document analysis has many advantages:

- An analysis of documents may reveal problems in an organization which would otherwise not be apparent.
- It can provide information about the past which may not be available from any other source. For example, programs may not exist any more except through records.
- Documents are often credible sources. A quote from a policy manual in an evaluation may provide an authoritative tone.
- Documents are usually accessible; sometimes people are not -- they have left the organization or may be too busy to see you.
- Using document can save time and money. One evaluation (which had limited funds) was based ENTIRELY on the review of existing program documents.

- Documents may be the only source of information on a given subject. In one PLEI organization changes had resulted in the hiring of new staff and a revision of goals. Past documents and correspondence reflected these changes more than any other source.
- Document analysis can be done spontaneously and discreetly. An evaluator does not have to set up an appointment to review minutes of meetings. And highly charged issues can sometimes be reviewed in documents without staff bringing up past painful issues.
- By using documents as a source of data an evaluator can sometimes increase her sample size. For example, it might be impossible to survey all the Farmworkers served by a program but an analysis of their use of PLEI publications (drawn from distribution lists) could provide important information.

As with most other data gathering methods, document analysis has its drawbacks.

- Documents can be misleading or biased -- often program staff present the program in its most favourable light, downplaying problems or failures.
- Documents can be inaccurate -- busy staff may neglect to keep track of statistics.
- Documents often provide limited information. They may provide data on one aspect of a program but neglect others.
- As documents become outdated they eventually get thrown away.
- Most organizations produce too many documents. It takes a lot of work to sift through paper in order to retrieve what is most important.
- Documents tend to reflect the concerns of the better educated staff or target group. The concerns of the poor or semi-literate may not appear in the organization's records simply because those groups tend not to write things down. Also, some staff simply keep more records than others.
- An organization may keep a wide variety of documents and records. Types of records may change over time. Because there is likely to be no standardized format for keeping records, data may be difficult to correlate.

For these reasons, a document analysis should not be the sole source of an evaluation. However, it is an effective tool used in combination with other techniques such as observation or interviewing of key people. Document analysis can be particularly useful in the initial stages of an evaluation in developing or focussing evaluation questions or confirming evaluation "hunches".

5.4 Choosing the best documents to analyze

Not all documents are equally valid. Caulley (1983:23) suggests four criteria for finding the most useful documents:

- Utilize the documents that are closest in time to the event/issue you are examining.
- Choose the documents which were actually meant to be records of events or issues (such as minutes of meetings rather than informal memos).
- Confidential documents often reveal more truth than others.
- Where possible, choose documents which have been put together by experienced observers or reporters. They are likely to be more reliable.

5.5 Basic steps in reviewing and analyzing documents

It is unlikely that you will use documents except as descriptive material. Steps in doing document analysis are as follows:

- | | |
|-------------|--|
| STEP
ONE | Determine the purpose of your document analysis (either alone or with an evaluation committee). You may want to review historical material, statistics relating to program use or details around a specific educational program. By determining your purpose you may be able to focus specifically on the documents you require. |
| STEP
TWO | Determine the availability of documents. Talk to staff who know the organization well. "What might I read that would help me understand your program's goals better?" "Was an agreement ever drawn up between the lawyers and field staff?" "Did you ever write a memo on this policy change?" |

Be sure to ask whether evaluations or program reviews have ever been carried out in the past. These may be overlooked by staff.

STEP THREE Be an eclectic explorer of documents. Search out government reports, past annual reports and staff memos; skim through pamphlets put out by the organization; check in the library if relevant. Ask the program co-ordinator or administrator if you can spend time going through program files (try to do this yourself. Even though the administrator might offer to do it, she will self select material to give you).

STEP FOUR Categorize, review and summarize material in the documents. You may wish to simply review material and make your own brief notes. If you are reviewing a large amount of material the following formats may help you summarize material so it can be retrieved more easily.

5.6 Document analysis formats

5.6.1 Document summary form

The Document Summary Form enables you to summarize the contents of documents so that they can be quickly reviewed. Fill one out each time you read a relevant document. Use these summaries as a basis for your analysis.

DOCUMENT SUMMARY FORM	
	Source: <u>Staff Memo</u>
	Location: <u>DD Office Files</u>
	Date of Source: <u>April 23, 1985</u>
	Date Recovered: <u>Nov 28, 1985</u>
1. Name of source:	<u>Staff Policy: Funding Cuts</u>
2. Significance of document:	<u>Response to funding cuts in 1986 budget</u>
3. Summary of content:	<u>Staff looked at program options - decision to focus on single mothers, the disabled and young offenders rather than deal with all groups superficially - this went to Board in May, 1986.</u>

5.6.2 The file box

In this system summaries describing each relevant document are written onto small file cards. They are then grouped into subject headings in a small file box. The subject headings are those which the evaluator has decided are relevant. When the data are being analyzed these file cards can easily be reviewed and broken into themes.

Development of Field Staff Network	Jun 15, 1985
(Staff meeting) → see my Book	
Staff decided to focus on developing a volunteer field staff network in 5 northern communities. Contacts will be made in Feb 1985. a "package" will be mailed outlining roles. Field staff will develop their own Advisory Committees	

Both this technique and the document summary form are most useful when a document analysis is a MAJOR part of your evaluation.

5.6.3 Tracking

"Tracking" is a system for analyzing documents which is slightly more sophisticated than those described above. Tracking involves looking through documents to find information which confirms or negates a specific hypothesis.

If the evaluator knows how things work, and if the evaluator suspects that a certain action has occurred, the evaluator can imagine what tracks must be left and then look for them. (Caulley, 1983, p. 21).

There are three steps in the tracking process (Caulley, 1983:21-22)

EXAMPLE

- (1) Establish the hypothesis around the evaluation issue.

The Law Information Council has provided legal information to teachers in urban areas, but not in rural areas.

- (2) Determine what tracks might be left in documents if the above hypothesis were true.
 - Correspondence might be limited to urban teachers
 - Requests for workshops might be limited to urban teachers.
 - Publications might be distributed only to urban teachers.
 - Newsletter might be distributed primarily to urban teachers.
- (3) Check the documents to find out if this hypothesis is true or not.

A drawback to this approach is that documents negating the hypothesis might not be explored. For this reason, tracking should be done in conjunction with another type of evaluation method.

6.0 COMMUNITY AND GROUP DATA COLLECTING METHODS

These approaches tap the knowledge of groups or group representatives in the community or target population. They are often used to assess needs (See MODULE III, Needs Assessment). Most of these techniques are impressionistic, and for this reason we recommend that you supplement one method with another.

6.1 Key informant approach

6.1.1 Description

This approach involves selecting knowledgeable community leaders or group representatives and surveying their opinions on PLEI needs in their communities. This is usually done by means of a short private interview, although a questionnaire can be used. It is relatively simple and inexpensive to implement. Another advantage is that by canvassing key informants for their opinions you may build up interest and support for your future PLEI programs. A disadvantage of this approach is that the key informants you assemble may represent only certain groups or viewpoints in the community. For this reason, the community informant approach is best used with other approaches. It is more effective when it is followed up by a COMMUNITY FORUM (see section 6.2 below).

6.1.2 How to do it.

STEP ONE

Draw up a list of key informants within the community you are surveying

Key informants should be chosen primarily on the basis of their knowledge of the community, its people, their PLEI needs and PLEI resources/services already available. Key informants are likely to be community agency leaders, legal clinic staff, representatives of minority groups, librarians, or lawyers.

The number of key informants you ultimately choose will depend on the size of the community. However, 10-30 is a good range from which to choose. If you are unfamiliar with the community then choose a small number of informants (3-5) and ask them to suggest several others who would have useful opinions.

STEP TWO

Develop a list of questions to ask each key informant

You will be asking questions about the existing PLEI services in the community, the current PLEI needs and the demographic characteristics of the population. Design the questions to be as concrete as possible. For example:

SAMPLE QUESTIONS:

1. What are common legal problems in order of importance?
2. What are the present sources of information available? How widely are they used?
3. What groups do not utilize PLEI resources?
4. What "hidden" legal issues exist in the community?
5. What changes have taken place in the community over the past two years (unemployment, immigration, etc.)?

[See also MODULE III on Needs Assessment]

STEP
THREE

Summarize the information, trying to find some common themes.

STEP
FOUR

Provide feedback to informants (checking out themes).

STEP
FIVE

Verify, i . themes and issues with members of the target group identified. For example, if your community informants have identified welfare mothers as those having the greatest need for PLEI, ask some single parent or welfare organization members whether this conclusion is valid.

6.2 Community forum approach

6.2.1 Description

The community forum approach entails the gathering together of members of a specific community to ask their opinions on PLEI needs. You may invite members of the native community, women, the disabled, single mothers or any other group with which you are interested in exploring PLEI needs. This approach is often used to validate or invalidate the information which has come from key informants. For example, if key informants stressed the PLEI needs of new immigrants in the community, then a community forum could be held consisting of members involved in or knowledgeable about new immigrants.

The community forum is inexpensive and relatively simple to organize. It can also be used to develop community support for a PLEI program. It offers an opportunity to explore needs in more depth. However, it is open to bias as well. All the members of a specific community may not be represented at a meeting. Sometimes the most powerful or opinionated members of a group will dominate. The community forum approach is best used as a supplement to other approaches -- there is no way to guarantee that it offers a completely valid view of PLEI needs.

6.2.2 How to do it

STEP
ONE

Call a meeting of the members of the specific community or communities you are assessing.

It may be difficult to ensure the meeting will be well attended. The forum should be widely publicized. Community leaders should be asked for advice on how best to organize it. A community group might be encouraged to sponsor it.

STEP
TWO

Questions or issues around specific needs are proposed to the participants by a co-ordinator

Community forums usually last 2 1/2 to 4 hours and may include information exchange, details about potential PLEI programs, and discussion of key informant data or other data on PLEI needs which have already been collected. In a community forum it is important to ensure that the widest range of opinions are elicited. Some ground rules for speaking should be set down (e.g., comments may be restricted to three minutes each, or a person allowed to speak only three times). These ground rules should be discussed and agreed to at the beginning of the meeting.

If the community forum is small, a ROUND TABLE discussion may be sufficient. A group facilitator should be present to ensure that everyone's views are represented. If the group is large, open the meeting with a general discussion, then break into small groups -- each with a facilitator and recorder of notes.

STEP
THREE

Summarize the data into "need" themes or issues.

STEP
FOUR

Thank the participants -- feed back a summary of the data to them from the notes.

6.3 Community impressions approach

This approach combines the KEY INFORMANT approach with the COMMUNITY FORUM approach, but adds an intermediate step. After initial information is collected from key informants, relevant documentation or statistics are integrated. This "hard data" is added to the material gained from the community forum and produces a more exact picture of community needs.

EXAMPLE 49: A COMMUNITY IMPRESSIONS APPROACH

1. Key informants identify immigrant community and women as having most PLEI needs.
2. The evaluator examines data concerning ethnic population in area, numbers of new immigrants, age groups of women, statistics dealing with employment, court records (divorce, battering), etc.
3. Community forums are held with representative groups of women and immigrants.
4. Data are formulated into themes and issues.

6.4 Nominal group approach

6.4.1 Description

This approach is best used when looking at a focussed issue, such as "What are the PLEI needs of the Native community?" It requires the assembly of a small representative group of people from the community (no more than ten ordinary citizens, community leaders, group leaders, or others who provide services). The nominal group approach works well with a group whose members hold a wide range of opinions. It allows ideas to be submitted individually so that group pressures are not too powerful. It allows participants to consider their ideas carefully and also be creative. However, because the nominal group approach is highly structured this may not sit well with some groups. Be sure to explain all the steps in the procedure at the beginning.

6.4.2 How to do it

STEP
ONE

Assemble the group. Pose a series of questions to the group. (They may be asked to identify PLEI needs of their group, other groups, or to identify problems in meeting these needs.) Ask them to fill out the answers silently on paper for 10 or 15 minutes.

STEP
TWO

The group leader records each idea (one at a time) by going around in a circle. Ideas are recorded on large sheets of paper. Ideas are not discussed, criticized or defended.

STEP
THREE

Discussion period follows in which participants can defend or describe ideas. Where possible, ideas can be eliminated or combined.

STEP
FOUR

Participants are asked to select the five most important ideas from the group list and rank them in order of importance. This is done anonymously and the results are handed to the co-ordinator.

STEP
FIVE

The co-ordinator tallies all the "votes" and feeds back the final result to the group.

6.5 Delphi approach

6.5.1 Description

The Delphi technique involves the collection and analysis of opinions about needs from a preselected group of individuals. These opinions are usually elicited by going through successive rounds of mail-out questionnaires. The Delphi can be useful to assess PLEI needs or opinions from people who are widely separated by geography. For example, the PLEI needs of young people in the province could be canvassed by mailing out questionnaires to representatives of youth groups, clubs or organizations throughout the province.

The Delphi approach is less easy to administer than other group approaches. A co-ordinator is needed to develop the questionnaire, to do the analysis, and supervise the mailout.

An advantage to the approach is that those involved participate anonymously. This allows for individuals to express themselves without pressure from others.

Because questions are specified in the mail-out questionnaire, the Delphi can be used by participants who are busy and difficult to interview personally.

The disadvantage of the Delphi approach is that the guidelines for using it are somewhat unclear. For example, there is no set rule about the number of times a questionnaire is returned for further modification. A second concern is that creative "fringe" opinions may be dropped in order to reach some kind of consensus.

The following set of procedures is one way the Delphi may be used to identify and assess PLEI needs.

6.5.2 How to do it

STEP
ONE

A questionnaire is developed which asks participants to rate the importance of PLEI needs for a target population:

Example: Please provide a rating for each of the following PLEI needs of teenagers, based on their level of importance
1 = not important at all, 10 = extremely important.
On the lines beneath each item, please briefly give a reason for your rating of that item.

1. Information on the young offender legislation
1 2 3 4 5 6 7 8 9 10

2. Information on drugs and the law
1 2 3 4 5 6 7 8 9 10

3. Information on employment (legislation, minimum wage)
1 2 3 4 5 6 7 8 9 10

etc.

STEP
TWO

Participants are selected who are likely to have developed opinions or information on the issue. A covering letter ensuring anonymity and explaining the process is enclosed with questionnaire

STEP
THREE

Questionnaires are reviewed and the information is summarized and sent back to each participant (their own answers may also be returned). Each participant is asked to fill out answers again on the same questions, taking into consideration the views and scores of the other (anonymous) participants. In other words, you are giving them the chance to change their opinion because of the feedback.

STEP
FOUR

Answers are again reviewed and tallied. Information is sent back to participants. There should be a growing convergence or divergence of opinions. This process can be repeated several times.

STEP
FIVE

Final results are tallied and sent to participants and to the planning group.

Remember that many community and group approaches can be used together. Joint methods will increase your data base and will ensure more accurate results.

7.0 SOCIAL INDICATORS ANALYSIS

A PLEI organization in British Columbia reviewed employment/unemployment statistics in several municipalities before determining their program goals for the next year. The statistics confirmed what they already suspected -- that there had been a drastic increase in unemployment in the area over the past year. They began to stress law information on related topics such as bankruptcy, UIC legislation and social assistance.

7.1 What are social indicators?

Social indicators are statistics which are gathered together in public records or reports. They measure social conditions or change over a period of time and can be used by social programs to indicate needs in certain segments of the population. They can also provide useful evaluative data to PLEI groups.

The Federal Census is the most familiar set of statistics available to the public. It provides information on many demographic characteristics such as the following:

- age
- sex
- marital status
- mother tongue
- year of immigration
- religion
- level of schooling
- occupation
- class of worker
- length of housing occupancy
- dates when last worked

Most federal, provincial and municipal departments produce other statistics which may be relevant to your organization. For example, the following statistics (as well as many others) are usually available through central statistics offices in each province:

- criminal statistics indicating the type and frequency of crime
- housing statistics indicating numbers and changes in rental units
- educational statistics indicating school enrolments, drop-outs and mother tongue of students
- health statistics indicating disease prevalence and services for families
- income assistance and unemployment statistics
- population served by libraries

7.2 Where to get social indicators

Each province and territory has an office which compiles all government statistics (including the Federal Census). These offices are often very helpful if you present them with a specific problem. They will often copy and mail material at no charge.

These offices often have directories which describe the statistics which can be obtained. The addresses of these offices are listed below:

PROVINCIAL AND TERRITORIAL GOVERNMENT STATISTICAL FOCAL POINTS (as of 08/02/84)

Newfoundland

Mr. George Courage
Director
Newfoundland Statistics Agency
Executive Council
3rd Floor
Confederation Building
St. John's, Nfld.
A1C 5T7

[Tel. (709) 737-2913]

Prince Edward Island

Mr. John Palmer
Director, Economics, Statistics
& Fiscal Analysis Division
Department of Finance and Tourism
2nd Floor
Walter Shaw Building
Rochford Street
P.O. Box 2000
Charlottetown, P.E.I.
C1A 7N8

[Tel. (902) 892-4168]

Nova Scotia

Mr. Paul Dober
Director, Statistics & Research
Services Branch
Policy and Planning Division
Department of Development
8th Floor
Bank of Montreal Tower
5151 George Street
Halifax, N.S.
B3J 2R7

[Tel. (902) 424-5691]

New Brunswick

Mr. Clifford R. Marks
Director
Economic and Statistics Branch
Department of Finance
Room 350, Centennial Building
King Street
Fredericton, N.B.
E3B 5H1

[Tel. (506) 453-2381]

Quebec

Madame Nicole Gendreau
Directrice generale
Bureau de la statistique du Quebec
117, rue Saint-Andre
Quebec
G1K 3Y3

[Tel. (418) 643-5030]

Ontario

Mr. John Tylee
Director
Statistical Services Branch
Office of Economic Policy
Ministry of Treasury and Economics
4th Floor, Frost Building North
Queen's Park
Toronto, Ontario
M7A 1Y7

[Tel. (416) 965-6566]

Manitoba

Mr. Wilf Falk
Director
Manitoba Bureau of Statistics
6th Floor, 1 Lakeview Square
155 Carlton Street
Winnipeg, Manitoba
R3C 0V8

[Tel. (204) 944-2988]

Saskatchewan

Mr. T. Cascadden
Acting Director
Saskatchewan Bureau of Statistics
Room 207, Walter Scott Building
3085 Albert Street
Regina, Saskatchewan
S4S 0B1

[Tel. (306) 565-6327]

Alberta

Mr. Harvey Ford
Director
Alberta Bureau of Statistics
Sir Frederick W. Haultain Building
7th Floor, 9811 - 109th Street
Edmonton, Alberta
T5K 0C8

[Tel. (403) 427-3058]

British Columbia

Dr. W.P. McReynolds
Assistant Deputy Minister
Economics and Statistics
Ministry of Industry and Small
Business Development
2nd Floor, 1405 Douglas Street
Victoria, B.C.
V8W 3C1

[Tel. (604) 387-1502]

Yukon

Mr. Colin Heartwell
Director
Economic Research and Planning
Department of Economic Development
& Intergovernmental Relations
1st Floor, Yukon Government Bldg.
2nd Avenue, S.W. Corner
P.O. Box 2703
Whitehorse, Yukon
Y1A 2C6

[Tel. (403) 667-5461]

Northwest Territories

Dr. Ralph Joyce
Territorial Statistician
Bureau of Statistics
5th Floor, Laing Building
Franklin Avenue (50th Ave. & 49th St.)
Yellowknife, N.W.T.
X1A 2L9

[Tel. (403) 873-7147]

Universities, social planning councils, and regional or municipal planning offices also carry useful statistics. Public libraries may have information offices or reference staff that can help you track down reports.

7.3 Advantages and disadvantages of using social indicators

Social indicators are often readily available and contain a large amount of data which would not be available elsewhere. Often it is just this magnitude which presents problems. You may need statistics from a smaller geographical area than, for example, a school or college district. If this is the case it might be necessary to go to the original data source and this may be time consuming.

Social indicators are useful because they demonstrate changes over time. For instance, you could use them to look at changes in employment or unemployment patterns or changes in the ethnic composition of a community.

Social service programs often use social indicators to pinpoint needs. For example, a high number of families living below the poverty line might be presumed to need social services. In one study of legal aid, it was found that the number of single parent families with children under six was the greatest single predictor of the need for legal aid. However, it is dangerous to assume a direct causal link between the presence of certain statistics and need. Statistics can provide a "pointer" to information you can explore further.

7.4 How to use social indicators

7.4.1 Aggregate statistics: You will probably use social indicators statistics in their aggregate form, that is, by looking at the total population of the group you are interested in. For example:

- The educational level of people in a school or college district may give you a sense of how PLEI should be best presented.
- A comparison of regions in terms of Public Library usage may provide information on whether to place PLEI material in specific libraries.
- Levels of welfare or unemployment rates in your area may provide indications of whether your organization is really serving low income clients.
- A review of occupational data from your program's census region might reveal whether your program thrust was still appropriate (for example, you might be emphasizing farmworkers, but domestic service workers may be an increasing group).

7.4.2 Problem incidence: Another way of using social indicators is to lump a number of statistics together to determine the degree of need (needs assessment) in specific regions. For example, you might suspect that certain groups (e.g. single parents on welfare) may have more PLEI needs than others. You would then analyze several regions on the basis of these statistics:*

*This general approach is adapted from a discussion in P. Rossi et al, Evaluation: A Systematic Approach, 1979, pp. 106-110.

Region	Census Population	Single Parents	On Welfare
Census Region 1	2000	20%	18%
Census Region 2	3000	30%	28%
Census Region 3	5000	50%	53%

According to these tabulations, Census Region 3 has the greatest level of need and would require 50% of the PLEI effort. Again, this type of information is best used as an indication of need rather than as the ONLY piece of information. You could follow these data up by calling together representatives of single parents, or welfare groups to discuss levels of PLEI need.

8.0 KEEPING PROGRAM STATISTICS

8.1 Purpose

Program statistics are usually kept in some form or other by most PLEI programs. Funders usually require a year end statement which describes the number of program participants. Good program statistics provide useful evaluation data.

The types of statistics you will keep are related to the goals and complexity of your organization. Statistics are commonly kept on:

- the numbers of program participants (people attending workshops, law forums etc.; students attending law classes).
- the numbers of telephone contacts (law phone-ins, information services).
- publication distribution lists -- numbers receiving publications, newsletter, law magazines.
- numbers of volunteers involved in program.

Most program staff don't like to keep on-going statistical records. It takes away time from other, more creative work. Also, many programs are faced with the task of collecting statistics in different formats for several funders. It is not surprising that program staff resist keeping detailed records.

8.2 Some basic rules

If your organization does not have an adequate system of record keeping the following suggestions may help:

- Keep your statistics collection system simple and relevant to the style of your organization.

- Don't engage in statistical overkill. Large numbers of statistics may seem to be impressive but, in fact, funders often don't have time to review them all. They may even feel you're trying to "snow them under."
- Think through your information requirements. Do you need to keep track of all your phone calls? Don't impose too many demands on staff. If there is resistance you won't get accurate or complete data anyway.
- Consider some alternatives to long term record keeping. One PLEI group, with a small staff and decentralized office, kept track of telephone calls intensively for two two-month periods rather than for the whole year.
- Designate one person on your staff or within your program to be responsible for co-ordinating the gathering of statistics. This is particularly important if your program is decentralized.

8.3 Two Formats

There are many formats you can use to keep simple program statistics. The following are models which you can adapt for your own purposes.

EXAMPLE 50: PROGRAM MONITORING FORM (CLIENT DROP-IN OR TELEPHONE MONITORING)																					
Month: _____																					
		Week 1					Week 2					Week 3					Week 4				
		day					day					day					day				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
<u>Information Requested</u>																					
Matrimonial Law																					
Consumer Law																					
Labour Law																					
Human Rights																					
etc																					

Your form can be arranged by subject (as above) or by the type of request (request for information, or materials). Other information can also be surveyed. (e.g. was the question answered in whole, in part or by further referral?) The questions should reflect your program's goals and needs.

EXAMPLE 51: WORKSHOP ATTENDANCE FORM
Workshop Title: _____
Date: _____
Name of Community: _____
Number attending: _____
New participants: _____
Workshop presenter: _____
Comments: _____

Attendance statistics would be gathered by the workshop presenter, perhaps by a show of hands. They would be handed to the staff person in charge of maintaining records.

9.0 A POT POURRI OF DATA GATHERING METHODS*

There are many, less common evaluation techniques which you can use to collect data. The following chart describes some of these and their uses. Because they are mainly impressionistic (they suggest themes, ideas, and problems) we recommend that they be used with other data collection methods such as observation and interviewing. You may also wish to read the section on Qualitative Data Analysis in MODULE V before using these techniques.

*The methods in this section are described in more detail in EVALUATION SOURCE BOOK, published by the American Council of Voluntary Agencies for Foreign Service, Inc., 1983.

TABLE 15: A POT POURRI OF DATA GATHERING METHODS

Name of Method	Description	How to do it	Advantages	Disadvantages
Creative expression (Art, drama role playing)	Evaluation participants (e.g. those attending PLEI program) are asked to demonstrate their reaction through an art form.	A Theme is used to guide the work -- "How has this program affected you? Your community? What would you like to see happening in the future? What is the most serious problem here?" People can work individually or in small groups. They can draw charts, maps, diagrams or pictures, act out before and after stories or role play a critical incident, problem situation or solving a problem. After the process is finished participants stand back and discuss/explain their work.	Can be used with groups which have few literacy skills - young children, mentally disabled, or those with whom art or drama is a more natural expression. Is fun to do and encourages participation.	Not everyone may want to participate. Hard to interpret and reach conclusions.
Diaries	Diaries are kept by individuals which record their involvement in a program and its impact on them. Activities, events and personal feelings may all be recorded.	Diaries are introduced to individuals at the beginning of a program. They can be written in a notebook or kept on a tape recorder. The evaluator should define the issues to be covered in the diary. Data can be shared and discussed between participants or collected by the evaluator and reviewed.	Allows participants to control the data. Is useful to record input of programs which have had an intense impact (e.g. PLEI program for battered women). Is creative. Is a self-reflective method-participants can gain just from doing it.	Participants may be uncomfortable sharing private thoughts. It may be a lengthy process to interpret the data. Not appropriate for people with few writing skills.
Investigative Journalism	A method which starts out looking at a "hunch" that there is a problem and then sets out to see if the "hunch" is true. Useful for looking at internal staff or organizational problems or trouble shooting within the program.	There is a sense that a problem exists (e.g. a program designed for Native People is not attracting Native People). The hunch is explored by informal discussions, observation, document analysis, or interviews with key people.	Is a good method to handle focussed trouble-shooting. Can be comprehensive.	Can seem to be a witch-hunt if not handled carefully. Although the problem can be exposed, the solution may be difficult. There may be no staff will or power to correct it.
Mapping	Specific aspects of a program can be mapped out to demonstrate structure and relationships. Can demonstrate how a program is "seen" by its staff or clientele.	Staff can be asked to draw an organizational chart, the structure of decision making, or relationship to other organizations in the community. Clients can be asked to draw how they perceive the program or their part in it.	Can provide unusual insights. Can be used in the future for reference. Participatory.	Hard for some groups to participate. Difficult to interpret.
Photography	Photographs can be used to document aspects of a program, such as pre and post program experiences or stimulate analysis of certain program aspects.	Photographs can be of people, places or things and can be still photos, videos, films or slides. Photos may demonstrate aspects of programs with intense impacts (a slide show showing Human Rights violations, compared with photos showing the results of a program). Photos can be used to stimulate discussion about an aspect of a program. - What is happening here? - Why does it happen? - What can we do about it? Photos can also document the life of a project and can be a dramatic picture story to offer to funders.	Photos represent life. People can relate to them. Photos are fun to look at and create many responses.	Some photography can be expensive. Some things may not be able to be photographed.
Problem Stories	Problem stories are accounts of situations or experiences within a program. They may highlight legal problems an individual has or the experiences he has had (negative and positive) in a program. Akin to a case study. However, a problem story is written by the individual himself.	Individuals can be given themes around which to develop stories. They can be asked to tell stories about their lives before and after being involved in a program. Stories can be read out in a group and discussed. EXAMPLE: Experience of a New Canadian coming to a workshop about the Law -- first impression, fears, experience, uncertainties, feelings -- later impact, involving family etc.	Creative. Good for pre-literate groups too. Concrete -- relates to true events. Good for before and after studies.	Hard to interpret. Can bring up sensitive material.

MODULE V

ANALYZING THE DATA



MODULE V

ANALYZING THE DATA

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MODULE V

ANALYZING THE DATA

1.0 OVERVIEW

This module describes how to organize, describe and interpret the data you have collected.

1.1 Quantitative and qualitative data

The term "data" can be broken into two broad types: quantitative data and qualitative data. These terms are not mutually exclusive; rather they describe emphases that are quite common in evaluation. By quantitative data we mean data that is primarily expressed in terms of numbers or quantities (e.g. "50 participants were satisfied; 20 were not satisfied") The meaning of quantitative data is usually interpreted in statistical terms (eg. "the median of participants was 23 per workshop"; or "these findings were significant at the .05 level", etc).

By qualitative data we mean data that is primarily expressed in terms of themes, ideas, events, personalities, histories, etc. The meaning of qualitative data often seems less clear or decisive than that of quantitative data, but it is no less important. It is usually expressed in terms such as the context of a program, how the data reveals another side of an issue, the classification of minority opinions, etc. (For example, the "success" of a human rights program needs to be assessed in the context of the area's social mix and local history: is the community ethnic urban? White rural? What sort of racial problems have there been locally? etc).

Neither approach to the collection and analysis of data is inherently superior. Both have limitations that make them vulnerable to criticism. (see Example 1). "Quantifiers" lay claim to greater objectivity, but can't deal with many problems which are unquantifiable. "Qualifiers" lay claim

EXAMPLE 1: TYPICAL METHODOLOGICAL ARGUMENTS BETWEEN "QUANTIFIERS" AND "QUALIFIERS"

QUANTIFIER: A quantitative methodology is more objective. The statistical tests we apply don't leave much room for subjective judgements.

QUALIFIER: You might be objective in what you do, but you're subjective in what you choose not to do. You can't deal with questions and problems that aren't quantifiable. For example, you might be able to tell me what score a student had on an achievement test on youth and the law, but you can't tell me whether the test is a true reflection of the student's understanding of the youth and the law unit. (For example, the student might be uptight about tests or find them irrelevant.) Nor can you tell me what meaning the youth and the law unit has for the children in terms of their family and social lives.

* * * *

QUALIFIER: Qualitative methodologies allow us to express many more insights about personal impacts, the history of a program and what meaning a PLEI program has on the people involved.

QUANTIFIER: Yes, but how do we know your so-called "insights" aren't just the biases of the evaluator? How do we know that those lovely quotes you sprinkle your report with are truly representative and not just juicy but meaningless tidbits? How do we know your so-called "history" of a program isn't just one person's version?

* * * *

QUANTIFIER: Quantitative methods are the best way of dealing with large scale (provincial) PLEI programs. Otherwise you can't get a complete overview.

QUALIFIER: It depends on the type of information you're after. Besides, the more people you survey in a structured way, the less you can ask them in depth. You can't afford to record anything that makes the data messy or that is unquantifiable. All you do is contact more and more people about less and less.

* * * *

QUALIFIER: By getting close to the people and programs we're studying, we define problems and issues in ways that are meaningful to them. We don't just assume that our categories and issues are the way they view the world.

QUANTIFIER: We can get just as close as you do in the design phase of an evaluation, and that's when it's important. Besides, what guarantee do we have that your so-called "meaningful issues" are meaningful to them?

to greater relevance, but often fail to demonstrate that their insights are valid and reliable. We would advise that whenever possible, organizations should use several methodologies -- both quantitative and qualitative -- in any comprehensive evaluation. Of course the choice of methodology depends on the original evaluation objectives, time and manpower constraints, and the availability of information.

1.2 Levels of analysis using quantitative data

Table 1 shows four levels of analysis using quantitative data. First, "raw data" are taken from various data collection instruments. These can include quantitative instruments like surveys and tests as well as instruments more usually associated with qualitative methods. For example, documents, diaries, observation records, tape recordings, and art work can provide frequency counts of various types of information.

Secondly, raw data are grouped in categories and counted, usually in the form of tables. This can be done manually or by computer.

Once data are tabulated they are easier to interpret. Interpretation, can be done in two ways. You can interpret data by describing them with descriptive statistics as in level 3 of the table (eg. giving various types of averages, or showing the spread of the data on various scales). You can also interpret data by testing their significance, and determining whether you are able to generalize your findings to indicate something about a wider population. This form of interpretation involves "inferential" statistics (e.g. Chi-square, Analysis of Variance).

These levels are discussed more fully in section 2 through 5. Each level in Table I does not have to proceed to the next. It is quite adequate for some evaluative purposes to stop at level 2 or 3, that is to provide a descriptive overview of a program.

TABLE 1: LEVELS OF ANALYSIS USING QUANTITATIVE DATA		
Type of Data or Data Analysis procedure	Its Purpose	Example
Level 1 RAW DATA	-The original source of your information; used as a basis for tabulating data, and for calculation using descriptive or inferential statistics	Answers on questionnaires, field records from observation. Documents Time logs Tape recordings Interview notes art work
Level 2 TABULATED DATA	-The organization of raw data by counting responses or items and arranging them in tables. -Used as a basis for calculation using descriptive statistics and inferential statistics	Frequency counts
Level 3 DESCRIPTIVE STATISTICS	-Used to describe where the centre of a mass of data is, or how the data spreads out from this centre. -Used as a basis for calculations using inferential statistics	Means, modes, ranges, standard deviations
Level 4 INFERENTIAL STATISTICS	-To test hypotheses, to determine the significance of relationships or differences between groups of data, and to make inferences about the effectiveness of a program	Chi-square (χ^2) Analysis of Variance (ANOVA) t Test (t)

Note: This table is not a prescription. That is, level 4 is not necessarily "best," although it will generally be necessary to have made calculations or additions at levels 2 or 3 before level 4 calculations can be made. It may be quite adequate for some PLEI purposes to present data solely at levels 2 or 3.

2.0 PREPARING RAW DATA FOR ANALYSIS

2.1 Computer or manual processing?

You will have made a decision when planning the evaluation as to whether to process your data manually or by computer. This decision would take into consideration such factors as:

- Size of your study

Is your sample size large, and equally important, are there a lot of questions on each questionnaire? You may have 200 questionnaires, but only 5 questions on each. This could be much less complicated to handle manually than 40 questionnaires with 30 questions.

- Intent of your study

If you are primarily doing a descriptive study, and only want to give number counts of various types of data, there's little need for a computer. Desk-top calculators are often all that is needed. If you want to test the significance of a number of your figures, a computer will be more important. This is especially true if you have a large data base and/or a large number of variables to handle.

- Availability of appropriate computer facilities and statistical packages

Most major cities and certainly universities would have computer facilities which could deal with the data PLEI studies would generate. All of the needs of an ambitious quantitative study would be met by using a "canned" program such as SPSS (the Statistical Package for the Social Sciences), which includes a large array of inferential statistics. There are lots of other statistical packages for business or personal applications, which wouldn't necessarily be appropriate for PLEI needs. If no appropriate package is available, your computer will have to be programmed to handle your data analysis requirements. This can be costly and time-consuming.

If you have to purchase the statistical package, it can be very expensive (e.g. around \$1,700 for the SPSS package, although their instruction booklets range from \$25-\$50). An alternative would be to get "public domain software" packages that have the types of programmed tests that you need. These can run as low as \$20. Bookstores often contain books on computer programs and resources which refer you to these packages, or you can obtain such information from computer clubs or networks in your province.

- Availability of trained personnel

Don't go to a data entry person and expect her/him to be a statistician. If you intend to use inferential statistics to analyze program data, and lack expertise yourself, you will need assistance from a statistician.

- Time and finances

Data has to be coded (prepared for the computer) which takes time. There is also the cost of data entry and computer rental, as well as consultation for data analysis. If a program is being written to handle your data, there are often "bugs" which have to be ironed out.

2.2 Coding

Coding means assigning categories and numbers to responses on questionnaires, so that the responses can be entered onto computer cards onto a manual tally sheet, or directly into a computer terminal. In telephone and in face-to-face interviews responses are often pre-coded right on the questionnaire. (See MODULE IV, Section 2.6.3 for a discussion of this.) This makes the code transfer to computer cards or discs much easier.

Until the early 1980's, data which was to be tabulated by computer would first be entered as codes on computer cards. However, like all things which we think will be with us forever, computer cards are rapidly going the way of the dinosaur. Data is now being entered directly onto

discs at the computer terminal. But since there still are some places where computer cards are used or where original PLEI data may be stored on cards, it is just as well to understand the card process. Besides, conceptually it is analagous to the process of direct data entry on discs. It is more concrete (most of us have seen computer cards), and therefore easy to understand.

Computer cards are stiff rectangular shaped pieces of paper. Standard IBM cards have 80 columns (from left to right) and ten rows (from top to bottom). Each question is assigned a number or numbers corresponding to the computer card column or columns. Each respoonse is assigned a row underneath the question column.

The person who is coding the responses will need to know the appropriate column and row numbers for each question. A sample set of instructions for doing this is shown in Example 2. Suppose question #1 on the original questionnaire was:

Which of the following sources have you used to obtain information on the law? Circle the number of each you have used:

- 1. Library**
- 2. Legal aid**
- 3. Police**
- 4. Lawyer**
- 5. Media (television, radio, newspaper)**
- 6. Legal Information Access Society**

Assume the respondent circled "library" and "Legal Information Access Society". If the coder referred to the coding instructions (example 2), he/she would see that "library" (INFOLIB) was in column 5 on the computer card, and Legal Information Access Society (INFOLIA) was in column 10. In both these columns he/she would punch item "2" (yes). In columns 6,7,8,9, he/she would punch a "1" (no) since the respondent did not use these sources. If the next question asked about the respondent's satisfaction and he/she was very satisfied with the library as a source of legal information, the coder would punch a "5" in column 11.

EXAMPLE 2: SAMPLE CODE INSTRUCTIONS			
Card Number - 1 (This refers to the computer card being used).			
Column This refers to the computer card column. There are 80 for each card.	Question number This refers to the question number on the questionnaire. See sample of question in text.	Variable Name This helps the computer operator to retrieve information on that variable from the computer. It will also appear on the computer printout.	Variable Description and Codes This is a brief summary of the data being entered and/or the question from the questionnaire, with the computer card row number for each response
1 2-4			Card Number Respondent Identification Number
5	1	INFOLIB	Whether used Library 1 - no 2 - yes
6	1	INFOLEG	Whether used Legal Aid 1 - no 2 - yes
7	1	INFOPOL	Whether used Police 1 - no 2 - yes
8	1	INFOLAW	Whether used lawyer 1 - no 2 - yes
9	1	INFOMED	Whether used media 1 - no 2 - yes
10	1	INFOLIA	Whether used LIAS 1 - no 2 - yes
11	2	SAT LIB	Satisfied with Library 1 - Very dissatisfied 2 - dissatisfied 3 - neither 4 - satisfied 5 - very satisfied
12	2	SAT LEG	Satisfied with Legal Aid 1 - Very dissatisfied 2 - dissatisfied 3 - neither 4 - satisfied 5 - very satisfied

Coding is straightforward for close-ended questions, as in the above example. With open-ended questions more skill and interpretation is required for the initial categorization of responses, although the actual steps involved are simple (see Table 2).

TABLE 2: STEPS IN CATEGORIZING AND CODING OPEN-ENDED QUESTIONS

1. Skim through the responses to get a general feel for their content.
2. Develop preliminary categories that seem to reflect the range of responses. Don't develop too many categories, or there won't be enough answers in each category for meaningful analysis. Check to see if you have two categories that really are the same. If so, combine them. On the other hand, don't make a category so broad that it is ambiguous or meaningless.
3. Start to go through the responses for each question and assign them to the appropriate categories. Put responses that don't fit into any category under "Other".
4. If responses seem to be repeating themselves and falling neatly into categories, you've probably found the right categories. If you are constantly putting answers in the category labeled "Other", then review all "Other" responses and try to develop new categories out of them.
5. Give each category a code number.
6. Ensure that the coder has a clear understanding of the categories and codes.

Thematic analysis is a process similar to that described in Table 2. It applies to in-depth interviews which are usually conducted face-to-face. In developing thematic categories, you are less concerned with categorizing specific replies than with determining the overall thrust, meaning and themes which emerge from the interviews. Similar methods are described in MODULE IV (Sections 4 and 5) regarding the analysis of observation and documents. All yield data which, once categorized, are easily coded in the same manner as with open-ended questions.

3.0 TABULATING DATA

Tabulation is a simple process of arranging data in a tabular (table-like) form. Once data have been coded and cards punched or data entered via a computer terminal, the print-out usually comes in tabular form, so your work is done for you. If you are doing tabulation manually, you do the work.

There are two common methods of tabulating data manually. The first is used if there are only a few questionnaires (eg. under 40) and if the majority of questions are close-ended. It consists of taking a blank questionnaire, and using it to record the answers to each question from all of the survey questionnaires. This can be done by using stick numbers (eg. ~~III~~ III = 8). It is easier to look through all the answers on each questionnaire before going on to the next questionnaire, than it is to record all of the answers for each question. Otherwise you'll be stumbling through 30 or 40 questionnaires continually. Once all the answers are recorded using stick figures, take another blank questionnaire and record the totals using Arabic numbers (eg. 8, 6, 5).

We don't advise the above method, mainly because it is messy and requires a lot of paper shuffling. Your questionnaires may not be adaptable to this type of recording. A clearer method is to use large sheets of graph paper and set up a grid with squares large enough to write figures in. Questionnaire numbers are arranged vertically down the left hand side of the sheet. Questions items and categories are arranged horizontally along the top. Responses to each question are recorded in the intersecting spaces. As shown in Example 3, the method of identifying each item and recording the responses is flexible and depends on your needs.

The type of data which emerges from tabulation is called frequency counts. That is, the totals at the bottom of each column represent the number of times respondents gave that answer. Often these data are useful in themselves and form the basis of many evaluation reports when presented in simple tables (see Section 4). They also form the basis of more complex statistical calculations described in Section 4 and 5.

EXAMPLE 3: SAMPLE TABULATION SHEET

Note: This sample mixes several methods of recording. Item 1 records category numbers at the top, representing the name of each region. Item 2 records the actual category (ie. numbers of staff) at the top. Item 3 also records the actual categories at the top. Item #4 provides for two types of answer. The first is category codes for the source of referrals for PLEI (sources 1-5). The second is category codes for frequency of referrals to each source. The codes themselves, (rather than x's) are entered in the squares. If you wished to use only x's, you could have 4 columns under each source of referral, to indicate the 4 frequency levels.

Question- naire I.D. Number	Item 1					Item 2				Item 3					Item 4				
	Library Region					# of staff handling legal mat- erials				# of requests for legal materials per month					Frequency of referrals out for PLEI, per Source				
	1	2	3	4	5	1	2	3	4	<1	1-5	6-20	21-40	>40	Source 1	Source 2	Source 3	Source 4	Source 5
001	x				x		x						x		2	2	2	2	2
002		x				x		x				x			2	3	3	3	3
003					x				x					x	3	3	3	4	3
004			x			x					x				2	2	2	1	1
005			x			x				x					1	2	2	1	1
006				x			x				x				1	2	2	2	1
007			x						x					x	2	3	4	2	3
008				x			x					x			3	1	2	2	2
009					x		x					x			2	2	2	2	3
010	x					x					x				1	1	2	2	2
TOTALS	2	2	3	1	2	4	4	1	1	1	3	3	2	1	C.C. 1-3 2-5 3-2 4-0	C.C. 1-2 2-5 3-3 4-0	C.C. 1-0 2-7 3-2 4-1	C.C. 1-2 2-6 3-1 4-1	C.C. 1-3 2-3 3-4 4-0
C.C. = Code Count																			

3.1 Editing out coding and tabulation errors

Because the task is repetitive and often monotonous, coding and tabulating of large numbers of questionnaire responses inevitably involves some error. Computer editing is useful in picking up three kinds of errors. The first is answers which are clearly out of the normal range. A sex code can only be 1 or 2. The same applies to yes/no responses. It is relatively easy to check computer print-outs for any 3's to such questions.

A second type of error is responses which are logically inconsistent. For example, suppose the first of a two part question was "have you attended any workshops sponsored by the Legal Information Access Society?" The second question was "If yes, identify which of the following workshops you have attended." If the answer to the first question is "1" (ie. no), then there should be no answers in the second part. Computer programs can be written to pick up these logical errors and print out "error messages". Alternately, you can determine logical inconsistencies yourself, and scan the printout for them.

A third type of error is incomplete or unentered data. A computer printout will include frequency tables, and if total responses (including referrals and "don't knows") are not consistent for each question, incomplete data entry is easily detected. For hand tabulated data, it is necessary to ensure that column and row tables are consistent for each question. In Example 2, the totals for each item should be ten since there are 10 questionnaires. In other cases, not all of the respondents will be expected to answer particular questions.

Errors such as the above may have been made by a respondent on a mail questionnaire, by an interviewer, by a hand coder or a keypuncher. Careful editing at all stages will help to eliminate errors.

4.0 DESCRIPTIVE STATISTICS

Many PLEI organizations have used brief handout questionnaires at workshops. Others have undertaken surveys of all or a sample of people who have attended lectures in a given period. A few organizations have surveyed communities or their province to determine needs for PLEI.

One of the main purposes of general surveys is descriptive: What types of PLEI needs do people have? Where do people come from who attend PLEI classes? What are their ages? How satisfied have they been? What sort of impact do the PLEI workshops, presentors and materials have?

To answer these questions you need to use appropriate descriptive statistics. A descriptive statistic is simply a number (e.g. a sum or frequency count, a percent, a mean, etc.) which describes or characterizes a set of numbers. For the non-mathematically inclined, even a short definition seems hopelessly abstract, but you will find your job easier if you concentrate on the question you want to answer with your data. Table 3 provides examples of data analysis questions which can be answered by commonly used statistics. The rest of this section describes these statistics and measures.

4.1 Frequency analysis

This is the most common and simplest form of descriptive statistic. It consists of adding up the number of items in each category. When the total frequency count for each category is displayed together in a table, you have a frequency distribution. Frequency counts can also be expressed in percents, ie. the proportion each category total represents out of all, items, times 100. A frequency distribution of Item 3 from Example 3 (p. 269) would look like this:

Frequency of Request for Legal Materials per month

<u>Frequency of request/month</u>	<u># of times reported</u>	<u>Percent</u>
Less than 1	1	10
1-5	3	30
6-20	3	30
21-40	2	20
over 40	1	10
TOTAL	10	100

TABLE 3: DATA ANALYSIS QUESTIONS AND CORRESPONDING DESCRIPTIVE STATISTICS

Types of Data Analysis Questions	Common Descriptive Statistics
<u>QUESTIONS ABOUT FREQUENCY</u> EG. How many participants at the youth and the law seminar were under the age of 19? What percent of participants at the seminar had attended previous seminars? What percent of our participants have at least some university education? How many "Landlord and tenant" booklets were distributed in Region 1?	FREQUENCY DISTRIBUTION; PERCENTS
<u>QUESTIONS ABOUT CENTRAL TENDENCY (Average)</u> EG. What was the average number of participants per workshop? What is the average level of education of all participants? How satisfied was the typical individual with our courses? What was the average score in the "Youth and the Law" test?	MODE, MEDIAN, MEAN
<u>QUESTIONS ABOUT VARIABILITY</u> EG. What is the range of income group we primarily serve? How spread out were the educational levels of people who could read our pamphlets? What was the range of scores in the "Courts and Youth" test?	RANGE, STANDARD DEVIATION
<u>QUESTIONS ABOUT RELATIVE POSITIONS</u> EG. How did attendance at the "Environment and Law" seminar compare with all other seminars? How did the frequency of participation of the under 20 age group compare with other age groups?	RANGE

4.2 Measures of central tendency (averages)

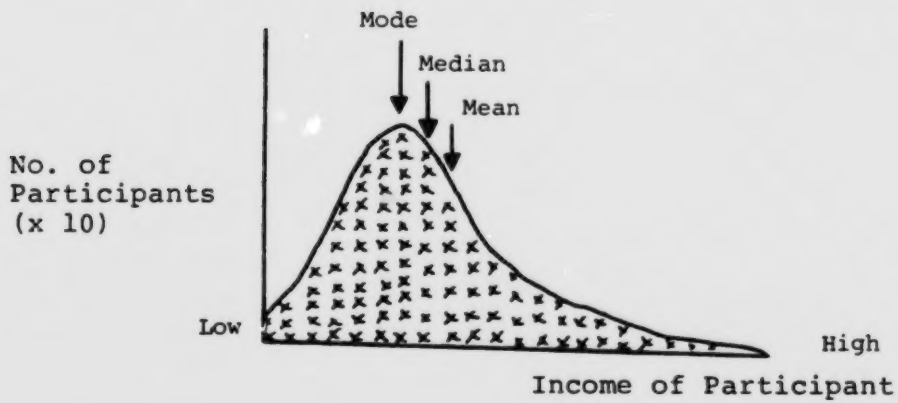
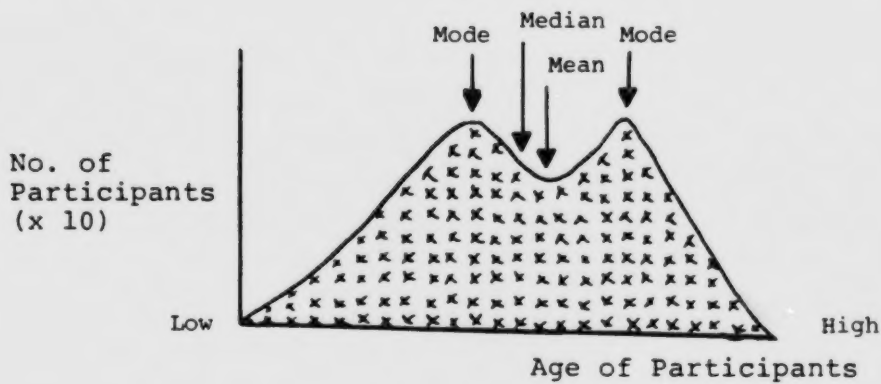
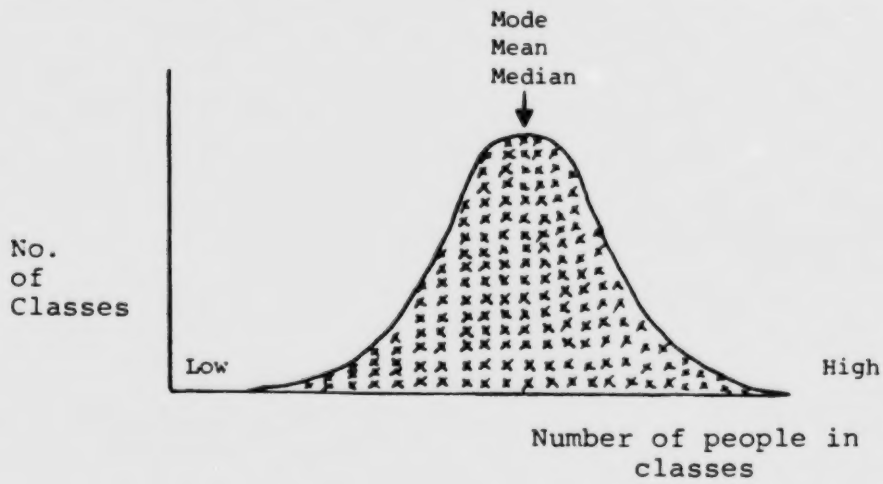
Most people are familiar with the concept of averages. The statistical term for a statistic which gives an average is a measure of central tendency. This apparently strange term makes more sense if you imagine a graph where the frequency counts are shown as x's. Looking at Example 4, you could ask, "Which size of class (or age grouping or income group) in this distribution of class sizes tends (or seems) to be the centre point?" There are three measures of central tendency (ie. ways of measuring the centre point) shown in the examples: the mode, the median and the mean.

- The MODE is the most frequent value
- The MEDIAN is the middle value
- The MEAN is the arithmetic average of the values

Although the graph gives you a gut feeling for why these three terms are called measures of central tendency, their differences are best understood using a real example. Suppose you sponsored a workshop on landlord and tenant laws, attended by 23 people. On an evaluation handout form you ask the participants their ages, and obtain the following data.

<u>Age of Participants</u>	<u>Number of Persons</u>
21	2
23	2
24	1
26	1
27	4 ← Mode (27)
29	1 ← Mean (31.5)
32	3 ← Median (32)
33	1
36	3
37	1
38	1
44	1
47	2
	<u>23</u>

EXAMPLE 4: MEASURES OF CENTRAL TENDANCY SHOWN GRAPHICALLY



The Mode is age 27, since 4 is the largest number of participants in a single age group. In Example 4, 2 modes are identified in the second graph, because 2 ages shared the highest frequency count.

The Median is the middle value, or the one that divides the total number of responses in half. Since the total number of responses is 23, the halfway point is the 12th response (the easiest way to calculate this is to take the total number of responses, add 1, and divide by 2. That is $\frac{23+1}{2} = \frac{24}{2} = 12$

The Mean is what is most commonly meant when we say average. To obtain this, you add the ages of all participants together and then divide by the number of participants, as follows. Using the same example, you would have

Age x Frequency = Total Years

21	x	2	=	42
23	x	2	=	46
24	x	1	=	24
26	x	1	=	26
27	x	4	=	108
29	x	1	=	29
32	x	3	=	96
33	x	1	=	33
36	x	3	=	108
37	x	1	=	37
38	x	1	=	38
44	x	1	=	44
47	x	2	=	94
				<u>725</u>

Total ages (years)	=	725
Number of participants	=	23
Mean	=	$\frac{725}{23} = 31.5$

Often ages (and other PLEI demographic data) are obtained in age groupings rather than by specific ages. For example, if the above data had been obtained in age groupings, your frequency tabulation might have 6 age categories. Means would then be calculated using the mid-point of each category, as follows:

<u>Age Group</u>	<u>Mid-point</u>	<u>No. of Persons</u>	<u>Total age in exam</u> <u>Age group</u>
21-25	23	5	115
26-30	28	6	168
31-35	33	4	132
36-40	38	5	190
41-45	43	1	43
46-50	48	2	96
		<u>23</u>	<u>744</u>

$$\text{Mean} = \frac{\text{Total of all ages}}{\text{Total participants}} = \frac{744}{23} = 32.35$$

We could give this mean or simply say the mean is in the range of 31-35. Obviously the mean differs slightly from the mean when calculated from exact ages.

4.2.1 Which central tendency measures are most appropriate?

The appropriateness of your measures depends on the type of data you have. There are three types of data.

- Nominal Data - independent categories with no natural order
 - eg. "Ethnicity" (French, English, German, Polish, etc.)
 - "Sources of PLEI information", (lawyer's office, television, school newspaper etc.)
 - "Occupations" (Secretary, clerk, architect, professor)
 - "Place names" (St. John's, North Battleford, etc.)
- Ordinal Data - categories which have some order
 - eg. Scales (of satisfaction, participation, usefulness)
 - Grades (A,B,C,D,E)

- Interval Data - ordinal categories where the intervals between categories are all equal
 - eq. Age data (The scale intervals are all years)
 - Income data (The scale intervals are all dollars)

Table 4 shows the appropriate measure of central tendency to use with each type of data. Obviously you have more flexibility in choosing descriptive measures when your data is interval data. For

TABLE 4: TYPE OF CENTRAL TENDENCY MEASURE APPROPRIATE TO DATA TYPES		
Type of Data	Type of Measure	Example
Nominal	Mode	"The modal ethnic category was French, with 45 respondents."
Ordinal	Mode	"Satisfaction results were bimodal: 35 were extremely satisfied and 35 were extremely dissatisfied."
	Median	"The median value of satisfaction on the 10 - point scale was 6."
Interval	Mode	"The highest frequency (modal) age category was 31-35."
	Median	"The median age of participants was 24."
	Mean	"The mean income of all participants was \$9,540."

this reason, some researchers claim that the data from satisfaction scales is interval data. Consider the following questions which might appear on a questionnaire:

Please rate your level of satisfaction with today's workshop:

1. Very dissatisfied
2. Quite dissatisfied
3. Neither dissatisfied nor satisfied
4. Quite satisfied
5. Very satisfied

Would this produce ordinal data or interval data? If you think it's interval data, that means you assume the interval between "very dissatisfied" and "quite dissatisfied" is the same as the interval between "quite dissatisfied" and "neither dissatisfied nor satisfied". If you feel this is a legitimate assumption, then you can treat this 5-point scale as an interval scale, and calculate means. Many researchers claim that equality of intervals in this case is not a legitimate assumption, and that these types of scales produce ordinal, not interval data. This is a good example of how statistics involves subjective judgement calls. The question is important, because a lot of PLEI questionnaires include this type of scale. However, we'll leave the decision up to you as to what type of data you believe you have.

If you consider it to be interval data, the following would be a calculation of the mean using sample results from the above question.

	Code	Frequency	Frequency x Value	
Very dissatisfied	1	4	4	Mean = $\frac{122}{36}$ = 3.4
Quite dissatisfied	2	3	6	
Neither satisfied nor dissatisfied	3	10	30	
Quite satisfied	4	13	52	
Very satisfied	5	6	30	
		36	122	

When you are dealing with interval data, there is another consideration as to which measure is appropriate. That is, which measure seems to be the most representative of the overall data? Consider the following annual income figures for workshop participants:

\$7,000 \$8,000 \$9,000 \$10,000 \$30,000.

The median (middle value) is \$9,000. The mean is \$12,800. Which is the more representative measure of central tendency for all participants? Obviously, the median is. Whenever there are a few extreme values, the median is often more useful.

On the other hand, means tend not to vary too much from sample to sample, if taken from the same population. Thus if we want to use a measure which will fairly reliably estimate the central tendency of a population, the mean is most appropriate.

Frequently you may wish to report more than one measure. Looking back at the second graph in Example 4 (p. 274), it would be helpful if the modes were reported as well as the mean or median. Otherwise the reader might assume a distribution that looked more like the first graph. You could achieve the same purpose by developing a frequency table (which would show the two modes) as well as report a mean.

4.3 Measures of variability (How much the data "spread out")

Just as it is helpful to describe data in terms of averages or central points, it is often important to present a picture of how the data spread out from the centre. Measures that do this are called measures of variability, or measures of dispersion. Four are considered here: the range, the standard deviation, the inter-quartile range and the variance.

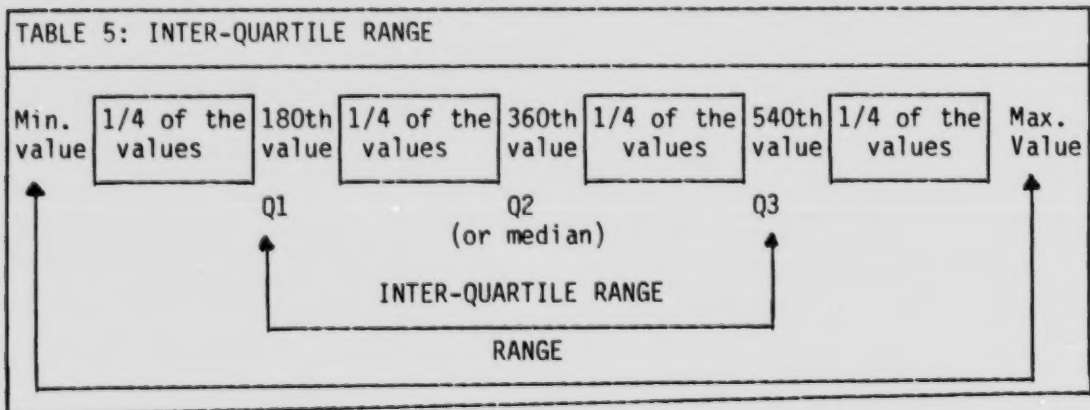
4.3.1 The range

The range is the difference between the highest and the lowest value in a distribution of data. Example 5 shows three distributions of income figures that would have the same mean, but radically different ranges. Obviously the mean by itself does not convey a full sense of the data. The range helps us see how the data is spread out around the mean.

4.3.2 The interquartile range

The range by itself doesn't tell you the full story of how the data spreads out. Referring again to Example 5 (first graph). If we are told that the range is \$20,000, we don't know whether all the incomes are bunched around the \$16,000 mark with just two extreme values at \$6,000 and \$26,000, or whether the incomes are fairly consistently spread out (as indeed they are).

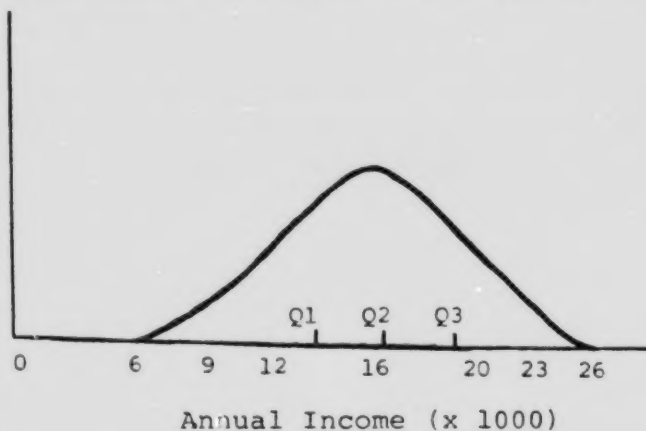
The inter-quartile range is based on quartiles, which divide all the values (ie. pieces of data, which in this case are reports on income) into four equal groups. If there are 720 pieces of data about income, they would be divided into four groups of 180. To do this, you start at the minimum value, and count through your first 180 values. The 180th value is the first quartile. It is labelled Q1 on Table 5. The 360th value is the second quartile (Q2) which is the same as the median (the "middle value"). The 540th value is the third quartile.



EXAMPLE 5: HOW RANGES CAN VARY WHILE MEANS STAY THE SAME

Graph #1

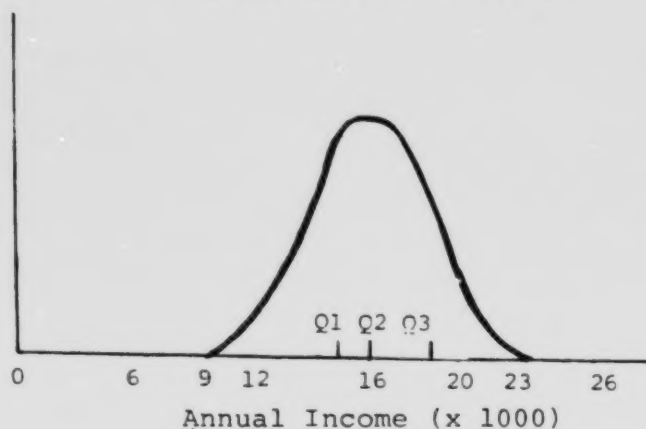
No. of
Participants



Mean = 16,000
Range = 20,000
Inter-quartile
Range = 6,000

Graph #2

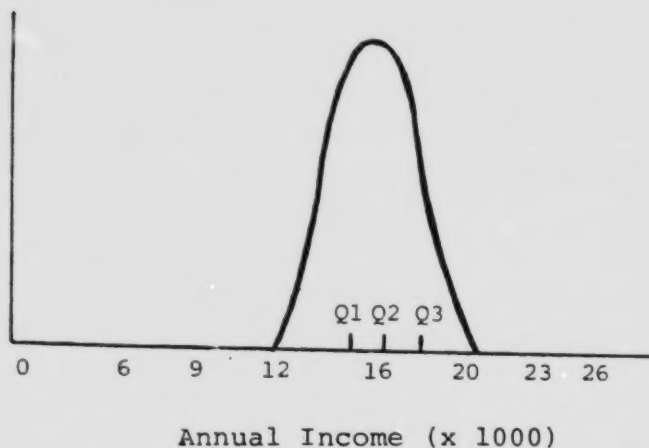
No. of
Participants



Mean = 16,000
Range = 14,000
Inter-quartile
Range = 4,000

Graph #3

No. of
Participants



Mean = 16,000
Range = 8,000
Inter-quartile
Range = 3,000

4.3.3 Standard deviation

The standard deviation is a more precise way than the inter-quartile range of telling you how the data are grouped around the centre. It is a measure of the amount by which values deviate (ie. vary or are different) from the mean. If they deviate a lot (ie. are spread out as in Graph #1 of Example 5), the standard (average) deviation will be large; if they deviate a small amount (as in Graph 3 in Example 5), the standard deviation will be small.

An example using just a few figures can clarify how the standard deviation is calculated. Here is a set of hypothetical income figures (measured in thousands) for participants in a PLEI workshop:

7	10	16	30	37	(Mean = 20)
---	----	----	----	----	-------------

We want to know how much each figure deviates from the mean. Looking at the first set of figures, we find the following deviations.

Income:	7	10	16	30	37
Deviation from 20:	-13	-10	-4	+10	+17

If we wanted to find the average deviation we would normally add these results, and divide by the number of values (ie. 5). But since the deviations involve negative and positive deviations, the result will always be zero. (ie. -13 plus -10 plus -4 plus 10 plus 17 = 0).

If you ignore the "-" and "+" signs before each deviation you could produce a total of 54. If you divide this figure by 5 you would have a figure called the MEAN DEVIATION. For various reasons stemming from mathematical theory, statisticians don't use the mean deviation very much, so let's go back to the standard deviation.

The way mathematicians get around the negative and positive signs is to square each of the deviations. This means you multiply each number by itself. Whenever you square a negative figure, the result is positive. So, taking the deviations and squaring them, we get the following squared deviations.

Deviation:	-13	-10	-4	+10	+17
Squared Deviation:	169	100	16	100	289

Then you take the mean (average) of these squared deviations:

$$\begin{array}{l} \text{Mean of squared} \\ \text{deviations:} \end{array} \quad \frac{169 + 100 + 16 + 100 + 289}{5} = 134.8$$

There is a short name for the mean of the square deviations -- it is called the VARIANCE, which is a useful measure of variability in its own right. But to get the standard deviation, one more step is required. You take the square root of the Variance.

In the above case, the standard deviation = $\sqrt{134.8} = 11.61$. Thus for the above figures, you could say that the standard deviation is 11.61.

To summarize, you go through the following steps to calculate the standard deviation of a set of figures.

- compute the deviation of each score from the mean
- square each difference (deviation)
- sum the results
- divide by the number of values (cases, figures)
- take the square root of that figure

A lot of people look at the standard deviation and say "so what? I know how to figure it out, but the result is just an abstract figure to me. How can I use it to interpret anything?" And you're right: because of that funny business with squaring figures it's easy to lose sight of any inherent meaning in the final result.

Don't despair. You've worked with abstract figures all your life. If you teach a young child to add up a bunch of figures, the operation may be just as abstract to her as standard deviations are to you. But if she's saving money, she might be interested in how to add.

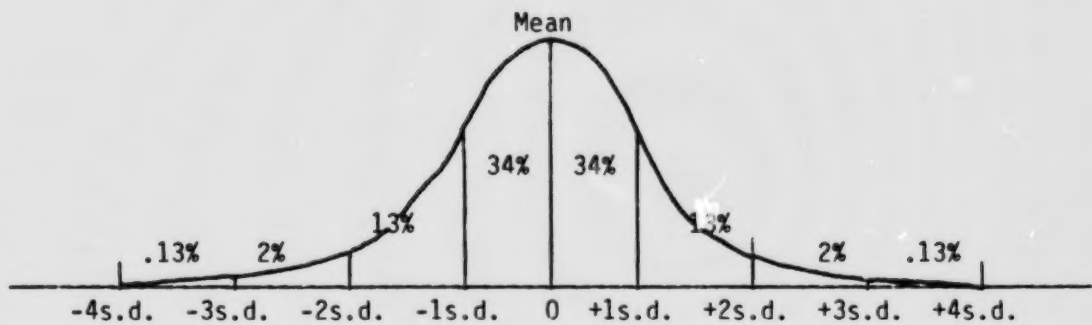
So what meaning as an interpretive tool can we find in standard deviation?

Let's compare the above set of figures with another set

Set #1	7	10	16	30	37	(mean = 20)
Set #2	19	20	21	23	27	(mean = 22)

Which set would you expect to have a larger standard deviation, or spread around the mean? For set #1, it is 11.61, for Set #2 it is 2.83. So the answer is the first set. This confirms our statement at the beginning of this section. If the data is spread out, the standard deviation is relatively large, if it is bunched close to the centre, the standard deviation will be small.

Another use of the standard deviation in interpreting variability is in relation to what's known as normal distributions. A "normal distribution" of values is shaped like this if plotted on a graph:



In normal distributions, 34% of all cases lie between the mean and 1 standard deviation (s.d.) from the mean; 13 1/2% lie between 2 s.d. and 1 s.d.; 2% lie between 3 s.d. and 2 s.d.; almost 50% of cases lie between 3 s.d. and the mean.

Thus in situations where we can assume a near normal distribution, the standard deviation will tell you approximately what percentage of cases fall between the mean and the number of standard deviations. This is a powerful device, both for presenting your own data and for interpreting the data of others, especially where raw data frequencies are not presented.

4.3.4 Variance

We encountered variance on our way to calculating standard deviations. It is simply the square of the standard deviation. Conversely, the standard deviation is the square root of the variance.

4.3.5 Which measures are most appropriate?

Just as with measures of central tendency, appropriate measures of variability depend on the type of data you are using. With ordinal data (see definition in Section 4.2.1) range and interquartile range are the appropriate variable measures. With interval data, you can also use range and interquartile range, but standard deviation is a more powerful tool.

On the other hand, if your distribution has a few very extreme cases, the standard deviation and variance may give misleading results because they may be very large. This is because these computations involve squaring figures, and squaring large numbers makes the results disproportionately large. In such a case you may wish to use inter-quartile range as your measure of variability (together with the median as your measure of central tendency).

5.0 INFERENCEAL STATISTICS

5.1 Introduction

Means, ranges, standard deviation and other descriptive statistical measures are used to describe samples. When we wish to move from describing samples to making inferences about populations, we enter the realm of inferential statistics. In other words, we would use descriptive statistics to describe data from a PLEI survey of 1000 randomly selected householders in Vancouver, but if we wanted to infer something about what these 1,000 households might be able to tell us about all Vancouverites (the population), we would need to use inferential statistics.

Another basic aspect of inferential statistics is that it involves the testing of an hypothesis (which we could loosely call a theory). This aspect goes hand in hand with the leap from sample to population. You can't make the leap on faith alone. You need to establish certain methods

by which you can justify your claim that your sample of 1000 can speak for the larger population. Also, if you want to explore the relationship between two variables (eg. legal awareness and age or sex), you need to establish a method whereby you can confidently claim that a relationship exists or does not exist.

This section provides an overview of typical types of PLEI issues that can be examined using certain types of statistical tests. To date, there has been little use of inferential statistics in the PLEI field (except in relation to school-based curricula, and to a lesser degree, community-based police programs). Thus the primary objective is not to provide a detailed examination of the theory behind inferential statistics, but to zero in on basic procedures and examples, showing how they would be worked through.

5.2 Steps in making inferences

With all the intimidating symbols and jargon which accompany statistical procedures, it is easy to lose sight of the fairly straightforward steps involved in making inferences. Basically, they are:

- 1) Develop your hypothesis and establish the level of significance
- 2) Obtain your data
- 3) Choose an appropriate statistical test (or tests)
- 4) Do the calculations required by the test, and come up with a figure
- 5) Look up this figure in a table of probabilities. An example of such a table is shown on p. 294.
- 6) Make a statistical conclusion

5.2.1 Develop your hypothesis and establish levels of significance

Your hypothesis (or theory) is expressed in terms of a null hypothesis and an alternate hypothesis. For example, if you are investigating whether there is a relationship between two variables,

your null hypothesis will state that there is no relationship. If your test reveals that there is a relationship, you will reject the null hypothesis and accept the alternative hypothesis.

The significance level refers to the degree of confidence you have that your conclusions are valid. The level of significance is based on probability theory, which explores the likelihood of events or results randomly occurring. If you establish a significance level of .05, you are saying that your interpretation has a 95% chance of being right. The lower the level of significance you choose, the less likely you are of being wrong. But if your significance level is too low it can be very difficult to prove anything. Although a common level of significance is .05, various factors affect the level of significance you choose. You should consult a statistician to determine an appropriate level.

Note that when you use the term "significance" in a statistical sense you are not saying something is important. You are simply saying that the results probably did not happen by chance.

5.2.2 Obtain your data

We will assume that you have done that using appropriate data-gathering techniques, and that you have interpreted data with appropriate descriptive statistics.

5.2.3 Choose an appropriate test

There are numerous types of tests used in inferential statistics. Table 6 suggests appropriate tests for fairly typical types of problems that could arise in the PLEI field. The choice of test depends on several factors:

● The type of data you have

- is it interval, ordinal or nominal? (see definitions in Section 4.2.1)
- if interval data, is it continuous (ie. it can be broken into successively smaller parts, as in time, income or age) or discrete (ie. it can't be broken up, as in family size or number of dependents).

● The number of variables or groups you have

- Some tests are appropriate for 2 groups or two variables, others for 3 or more

● Whether you want to test a difference or a relationship (association)

● The number of cases you have

- same tests are more appropriate than others if you have a small sample

5.2.4 Do the test calculations

Examples of several common tests and their calculations are provided in Sections 5.3-5.6

5.2.5 Consult appropriate tables and make conclusions

Tables which allow you to interpret your results from a variety of statistical tests are available in most university statistical texts. You can also use more popular manuals like the Penguin Book of Mathematical and Statistical Tables. They show you what the "critical levels" of a particular statistic are in relation to the level of significance you have chosen and a calculation called "degrees of freedom" (examples are shown in Sections 5.3 - 5.6, especially p. 294). You will then compare your calculated statistic with the critical level statistic. This will determine whether you reject or retain the null hypothesis.

TABLE 6
USE OF STATISTICAL TESTS

Type of Data	Statistical test	Purpose	Sample Evaluation Question
INTERVAL DATA eg. a score on an achievement test	Pooled t-test	To determine whether a significant difference exists between the scores of two groups	Did high school students who viewed a PLEI video plus went on a court tour do better on an achievement test than a control group who only saw the video?
	paired t-test	To determine whether a significant difference exists between pre-test and post-test scores of a single group	Did a group of high school students perform significantly better on an achievement test after their PLEI unit in Youth and the Law than they did before?
	Analysis of variance	same as above, but for 3 or more groups	Which group did better on an achievement test: group #1 - viewed a PLEI video and went on court tour group #2 - only viewed video group #3 - had classroom lecture
	Pearson product moment correlation coefficient	To determine whether an association exists between two variables	Is there an association between the educational level of PLEI volunteers and the amount of time they spend volunteering?
ORDINAL DATA eg. data from ordinal scales such as satisfaction or self-concept scales, where scores have been converted to ranks	Chi-square	To determine whether there are differences between 2 or more variables or groups	Are there significant differences in the level of assertiveness (as indicated on an assertiveness test) of social assistance recipients in each of these groups: group #1 - who have attended a role-play workshop on rights of social assistance recipients group #2 - who have received written information in basic English group #3 - who have received no PLEI services
	Spearman correlation	To determine whether there is a relationship between two ordinal variables	Is there a significant relationship between income per annum (or age, or number of years schooling) and knowledge of appropriate sources of legal assistance (as indicated in a test)?
NOMINAL DATA eg. frequency counts of nominal categories (native Indian, place of residence etc.)	Chi-square	To determine whether there are differences between 2 or more variables	Is the number of native people attending PLEI workshops significantly different from what one would expect, given census data on ethnic background for the community?

5.3 The pooled t-test*

Often we would like to know the following: If two groups are treated differently, will there be a difference in their resulting behaviour? From a statistical standpoint, what we are asking is whether there is a significant difference between the scores of two groups, on a particular measure (eq. an achievement test). Consider this example.

Sample Problem and Procedures

A Canadian PLEI group operate a speakers bureau with over 100 events being organized each year. For those who were able to attend, first time speakers attended a speaker's "coaching session" to help him/her deal with "stage fright". The sessions consisted of a number of exercises designed to lower anxiety levels. The researcher wants to know if the "coaching session" really helped on lowering anxiety levels prior to the speaking engagement.

A group of 25 first time speakers were used as the sample. They were randomly assigned to two groups -- Group A receiving the "coaching session" and Group B not receiving the "coaching session". Each was given a standardized anxiety test on the day of the speaking engagement.

Step 1: State assumptions:

There are several underlying assumptions in setting up the samples for a t-test in this way:

- The data must consist of interval measurements which are continuous in nature (The anxiety test is on an interval scale.)
- The samples must be randomly drawn or assigned. (They were.)
- The population must be normally distributed. (We can assume that there is a normal distribution of the population ranging from "very anxious" to "not at all anxious".)
- The standard deviations of the population from which each of the samples is drawn must be equal. (This is usually the case in any event.)

*The hypothetical examples and calculations provided in sections 5.3-5.6 have been generously provided by John Pyl of the Canadian Legal Information Council.

Step 2: Obtain the test statistic

The test statistic for pooled t is:

$$t = \frac{\bar{Y}_1 - \bar{Y}_2}{Sp \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad \text{where}$$

$\bar{Y}_1$ = mean of sample A

$\bar{Y}_2$ = mean of sample B

Sp = pooled or "average" standard deviation of the two groups
where,

$$Sp = \sqrt{\frac{S_1^2(n_1 - 1) + S_2^2(n_2 - 1)}{n_1 + n_2 - 2}}$$

Where S_1 = Standard deviation of Sample A

S_2 = Standard deviation of Sample B

n_1 = number of cases in Sample A

n_2 = number of cases in Sample B

df (degrees of Freedom) = $n_1 + n_2 - 2$

Step 3: Establish the null hypothesis and level of significance

The null hypothesis (H_0) is that the mean level of anxiety of sample A will be the same as that of sample B.

$$H_0: M_A = M_B$$

The alternate hypothesis (H_A) is that the mean level of anxiety of Sample A will be less than that of Sample B

$$H_A: M_A < M_B$$

The level of significance (α) is set at .05.

Step 4: Obtain the test data

Assume that we obtain the following data before the t- statistic is calculated:

Group A: (received coaching session)

$$n = 10$$

$$\bar{Y} = 18 \quad (\text{Mean score on anxiety test})$$

$$S = 2.4$$

Group B: (did not receive coaching session)

$$n = 15$$

$$\bar{Y} = 15 \quad (\text{mean score on anxiety test})$$

$$S = 2.8$$

Step 5: Do calculation using the t-statistic

First we have to figure out the pooled standard deviation.

$$\begin{aligned} S_p &= \sqrt{\frac{S_A^2(n_A - 1) + S_B^2(n_B - 1)}{n_A + n_B - 2}} \\ &= \sqrt{\frac{(2.4)^2(10 - 1) + (2.8)^2(15 - 1)}{10 + 15 - 2}} \\ &= \sqrt{\frac{51.84 + 109.76}{23}} \\ &= \sqrt{\frac{161.6}{23}} = \sqrt{7.03} = \boxed{2.65} \end{aligned}$$

We now know what we need to find the test statistic t

$$\begin{aligned} t &= \frac{\bar{Y}_A - \bar{Y}_B}{S_p \sqrt{\frac{1}{n_A} + \frac{1}{n_B}}} \\ &= \frac{18 - 15}{2.65 \sqrt{\frac{1}{10} + \frac{1}{15}}} = \frac{3}{2.65 \sqrt{.1 + .07}} \\ &= \frac{3}{2.65(\sqrt{.17})} = \frac{3}{(2.65)(.41)} \\ &= \frac{3}{1.09} = \boxed{2.75} \end{aligned}$$

therefore calculated t = 2.75

Step 6: Determine the level of t required at the .05 significance level for rejection of the null hypothesis (critical t)

Calculate the degrees of freedom (df)

$$\begin{aligned} df &= n_A + n_B - 2 \\ &= 10 + 15 - 2 \\ &= 23 \end{aligned}$$

Consult a critical values table showing the distribution of t at different significance levels and different degrees of freedom.

Here is a portion of a table from p. 52 of R.D. Nelson's The Penguin Book of Mathematical and Statistical Tables. The row at the top (labelled "P") shows various levels of significance you might apply for your test. The column on the left lists degrees of freedom (labelled V for "V" degrees of freedom). The actual table lists degrees of freedom from 1 to 30, and then at intervals up to infinity. We only show that portion of the table from 21 to 25 degrees of freedom.

P \ V	.10	.05	.025	.01	.005	.001
21	1.323	1.721	2.080	2.518	2.831	3.527
22	1.321	1.717	2.074	2.508	2.819	3.505
23	1.319	1.714	2.069	2.500	2.807	3.485
24	1.318	1.711	2.064	2.492	2.797	3.467
25	1.316	1.708	2.060	2.485	2.787	3.450

At $df=23$, the table shows that the critical value of t for a significance level of .05 is 1.714. Our critical value will be negative, i.e. - 1.714 because the difference in means is negative ($\bar{Y}_A$ was bigger than $\bar{Y}_B$). Our value of calculated t must have a negative value larger than -1.714 to be significant and lead to a rejection of the null hypothesis.

Step 7: Reach a conclusion

Since our calculated t is 2.75 and the critical t is -1.714, the difference in means is not significant. We therefore retain the null hypothesis and assume that the "coaching sessions" have no effect on anxiety levels compared to situations in which no coaching is given to speakers.

5.4 Paired t-test

Most often the paired t-test is used to look at a particular characteristic "before" and "after" the subject is given a treatment. Instead of looking at differences between means as in the pooled t-test, here we look at the mean of the differences in scores.

Sample Problem and Procedures

A PLEI practitioner wants to know if tenants know more about their rights a week after a presentation on tenants' rights compared to a week before the presentation.

Knowledge of tenants' rights is measured by the "standard knowledge of tenants' rights scale" which can have a top score of 100 points.

A group of 9 tenants are randomly selected and tested before and after the tenants' rights presentation.

Step 1: State the assumptions

They are basically the same as in the pooled t-test.

Step 2: Obtain the test statistic

The test statistic for a paired t is:

$$t = \frac{\bar{d} - D}{\frac{sd}{\sqrt{n}}}$$

Where d = mean difference in sample scores

D = mean difference in population scores (assumed to be 0)

sd = the standard deviation of the sample differences

n = number of cases

Step 3: Establish the null hypothesis and level of significance

The null hypothesis (H_0) is that there will be no statistical difference in tenant knowledge a week after the presentation, ie., that $D=0$.

The level of significance is .05

Step 4: Obtain the test data

Here are the results:

<u>Tenant</u>	<u>Before</u> <u>Score</u>	<u>After</u> <u>Score</u>	<u>Differences</u>	<u>d²</u>
1	86	90	+4	16
2	78	76	-2	4
3	69	80	+11	121
4	77	79	+2	4
5	82	87	+5	10
6	73	75	+2	4
7	72	69	-3	9
8	82	91	+9	81
9	81	73	-8	64
			$d = \frac{+20}{9}$	

$$\begin{aligned} \sum d &= \frac{+20}{9} & \sum d^2 &= 313 \\ &= 2.22 & (\text{note: } \sum &= \text{sum of}) \end{aligned}$$

Although the mean of the difference in scores is +2.22, we don't know whether this difference is a significant one, or whether it could just have occurred by chance.

Step 5: Do calculation using the t-statistic

Remember, the test statistic is

$$= \frac{\bar{d} - D}{\frac{sd}{\sqrt{n}}}$$

We find Sd using the same formula as for s (standard deviation generally):

$$\begin{aligned} Sd &= \sqrt{\frac{\sum d^2 - \left(\frac{\sum d}{n}\right)^2}{n-1}} \\ &= \sqrt{\frac{313 - \left(\frac{20}{9}\right)^2}{8}} = \sqrt{\frac{313 - 44.44}{8}} \\ &= \sqrt{33.57} = \boxed{5.79} \end{aligned}$$

We now have what we need to fill in the formula for calculated t:

$$\begin{aligned} t &= \frac{\bar{d} - D}{\frac{Sd}{\sqrt{n}}} \\ &= \frac{2.22}{\frac{5.79}{\sqrt{9}}} = \frac{2.22}{\frac{5.79}{3}} = \frac{2.22}{1.93} \\ &= 1.15 \end{aligned}$$

Therefore calculated $t = 1.15$

Step 6: Determine the level of t required at the .05 significance level for rejection of the null hypothesis (critical t)

Calculate the degrees of freedom (df):

$$\begin{aligned} df &= n-1 \\ &= 9-1 \\ &= 8 \end{aligned}$$

Consult a critical values table showing the distribution of t at different significance levels and different degrees of freedom.

At $df = 8$, the table shows that the critical value of t is 1.8595. Any value of t less than 1.8595 is not significant and would not lead to a rejection of the null hypothesis.

Step 7: Reach a conclusion

Since our calculated t was 1.15 and the critical t is 1.8595, we will retain the null hypothesis and assume that the presentation on tenant rights made no significant difference on tenant knowledge of tenant rights a week after the presentation.

5.5 Chi-Square

A basic question answered by Chi-square is whether frequencies observed in a sample deviate significantly from some theorized (expected) population frequencies.

In other words, we want to know whether the "observed" and "expected" frequencies are due to chance variation (ie sampling error) or whether there is a true difference in the population proportions.

Sample problem and procedures

A researcher wants to determine if a particular type of PLEI material has an effect on knowledge of family law. There are 3 types of material all containing the same amount of substantive law:

- a booklet
- a video
- a seminar presentation

A group of 60 people were randomly assigned to each of the above groups, so that each of the learning materials was used with 10 participants. Following this exposure, participants were tested on their knowledge of family law and rated as being "low", "medium", or "high" on some sort of testing measure.

Thus the independent variable could be considered as the "mode of presentation of material." The dependent variable would be "level of knowledge attained." The researcher wants to "know whether the dependent variable "depends on" or is significantly related to any of the independent variables.

Step 1: State assumptions

χ^2 can be used with all levels of measurement: interval, ordinal, and most importantly, nominal. It can also be used with both discrete and continuous data.

No assumption of normality is made.

Step 2: Obtain the test statistic

The Chi-square test statistic is as follows:

$$\text{Chi-square } (\chi^2) = \sum \frac{(O-E)^2}{E}$$

Where Σ = sum of
 O = observed frequencies
 E = expected frequencies

Step 3: Establish null hypothesis and level of significance

The null hypothesis (H_0) is that there is no association between the mode of presentation and the level of knowledge attained. The alternative hypothesis (H_A) is that such an association does exist.

The level of significance is set at .01

Step 4: Obtain test data

First you set up a contingency table, which is simply a table showing the various relationships between variables (the letters in the upper corners of the cells are cell labels.) This table contains the "observed frequencies," ie. the frequencies obtained from the actual tests.

Mode of presentation	Level of knowledge			
	Low	Medium	High	TOTAL
Booklet	a 4	b 6	c 10	20
Video	d 6	e 10	f 4	20
Seminar	g 10	h 5	i 5	20
TOTAL	20	21	19	60

Now we need to calculate the expected frequencies. They are calculated by multiplying the column totals by the row totals and dividing by N (the number of cases) for each cell.

Therefore:

$$E_a = \frac{(20)(20)}{60} = 6.67$$

$$E_e = 7.0$$

$$E_b = \frac{(20)(21)}{60} = 7.0$$

$$E_f = 6.33$$

$$E_c = \frac{(20)(19)}{60} = 6.33$$

$$E_g = 6.67$$

$$E_h = 7.0$$

$$E_d = 6.67$$

$$E_i = 6.33$$

Step 5: Do calculation using the test statistic

The χ^2 test statistic is:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$$\chi^2 = \frac{(4-6.67)^2}{6.67} + \frac{(6-7)^2}{7} + \frac{(10-6.33)^2}{6.33}$$

$$+ \frac{(6-6.67)^2}{6.67} + \frac{(10-7)^2}{7} + \frac{(4-6.33)^2}{6.33}$$

$$+ \frac{(10-6.67)^2}{6.67} + \frac{(5-7)^2}{7} + \frac{(5-6.33)^2}{6.33}$$

$$= (1.07) + (.14) + (2.13) + (.07) + (1.29) + (.86) +$$

$$(1.66) + (.57) + (.28) = 8.07$$

Step 6: Determine the critical level of the Chi square at the .01 significance level

$$\begin{aligned} \text{The degrees of freedom (df)} &= (r-1)(c-1) \\ &= (3-1)(3-1) \\ &= 4 \end{aligned}$$

r = row
c = column

From a table showing distribution of χ^2 , at a significance level of .01, the critical level of χ^2 is 13.277. Therefore if the calculated χ^2 is less than 13.277 we retain the null hypothesis of no association.

Step 7: Reach a conclusion

Since the calculated χ^2 is 8.07, it is less than the critical level of χ^2 required to reject the null hypothesis. Thus the null hypothesis is retained, ie. there is no association between the mode of presentation and the level of knowledge attained.

Note: The contingency table on p. 299 was a 3 by 3 table. That is, we were looking at relationships between three "knowledge" variables and three "presentation" variables. If we had only needed a 2 by 2 table (e.g. two knowledge variables and two presentation variables), we would have used a special formula as follows:

$$\chi^2 = \sum \frac{(|O - E| - .5)^2}{E}$$

Where the bar symbol ($|O - E|$) means that any values within the bars are absolute values, i.e. even if an observed or expected value is negative, it will be treated as positive in any calculations.

All 2 by 2 χ^2 tables require this formula.

5.6 Pearson product moment correlation coefficient

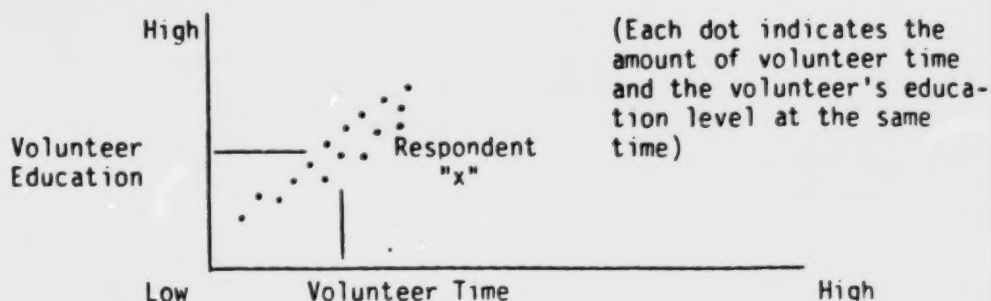
Sometimes we want to know the nature and strength of a relationship between two variables. Imagine a graph on which we've plotted two pieces of information about the same person. For example, we could plot the amount of time a volunteer spends on one axis of the graph, and his education level on the other axis. You put the dot at the intersection of the two values (see Table 7).

When the dots for all respondents have been plotted, you have a "scattergram" which may or may not show a pattern. Graph #1 shows a positive relationship: when the volunteer time is high the level of education also appears to be high. The second graph indicates that when volunteer time is low, volunteer education level is high. The third graph show no describable relationship.

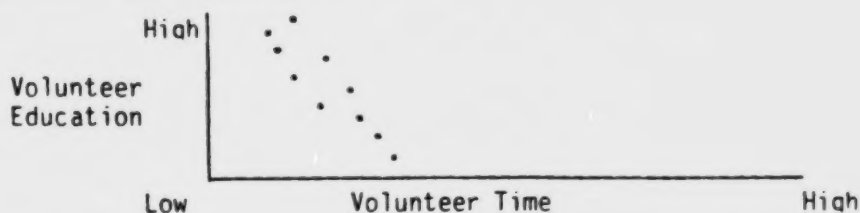
The Pearson Product Moment Correlation Coefficient is a statistic which measures the strength (from 0 to 1) and direction (negative or positive) of the relationship. If the co-efficient resulting from the statistical test is +1, it indicates a perfect positive "linear" relationship (ie. forming a line). If it is -1, it indicates a perfect negative linear relationship. If it is 0, it indicates no relationship.

TABLE 7: SCATTER PLOTS SHOWING VARIOUS RELATIONSHIPS

Graph #1: Positive Relationship:



Graph #2: Negative Relationship:



Graph #3: No Relationship:



Sample problems and procedures

A researcher hypothesizes that in a local PLEI group the education level of volunteers seems to be related to the amount of volunteer time which volunteers put in for the group.

The researcher measures the education level in "years of schooling after elementary school" (X_i). She measures volunteer time in mean numbers of hours put in on behalf of the organization over a given time (Y_i).

Step 1: State assumptions

The co-efficient can measure only linear (straight-line) relationships. If the scattergram reveals curvilinear relationships, this statistic can't be used.

Both variables must be on interval scales and be continuous in nature.

Step 2: Obtain the test statistic

The test statistic is as follows:

$$\text{Coefficient } (r) = \frac{S_{xy}}{\sqrt{S_{xx}S_{yy}}}, \text{ where}$$

$$S_{yy} = \sum Y^2 - \frac{(\sum Y)^2}{n}$$

$$S_{xx} = \sum X^2 - \frac{(\sum X)^2}{n}$$

$$S_{xy} = \sum XY - \frac{(\sum X)(\sum Y)}{n}$$

Remember $\sum$ = "Sum of"

Step 3: Establish null hypothesis and level of significance

The null hypothesis is that there is no relationship between level of volunteer education and volunteer time spent on volunteering.

The level of significance is .05.

Step 4: Obtain test data

Here are the results:

Volunteer	Volunteer Education Level (X)	Volunteer Education Level Squared (X ²)	Time spent Volunteering (Y)	Time spent volunteering squared (Y ²)
1	4	16	8	64
2	5	25	12	144
3	8	64	18	324
4	2	4	6	36
5	7	49	14	196
6	3	9	8	64
7	9	81	18	324
8	6	36	10	100
n = 8	ΣX = 44	ΣX ² = 284	ΣY = 94	ΣY ² = 1252

$$\begin{aligned}
 XY &= (4)(8) + (5)(12) + (8)(18) + (2)(6) + (7)(14) + \\
 &\quad (3)(8) + (9)(18) + (6)(10) \\
 &= 32 + 60 + 144 + 12 + 98 + 24 + 162 + 60 \\
 &= 592
 \end{aligned}$$

Step 5: Do calculations using test statistic

Now, just fill in the formulas:

$$S_{yy} = \Sigma Y^2 - \frac{(\Sigma Y)^2}{n}$$

$$= 1252 - \frac{(8836)}{8}$$

$$= 1252 - 1104.5 = \boxed{147.5}$$

$$S_{xx} = \Sigma X^2 - \frac{(\Sigma X)^2}{n}$$

$$= 284 - \frac{(1936)}{8}$$

$$= 284 - 242 = \boxed{42}$$

$$S_{xy} = \Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{n}$$

$$= 592 - \frac{(44)(94)}{8}$$

$$= 592 - 517 = \boxed{75}$$

So now let's compute "r"

$$\begin{aligned} r &= \frac{S_{xy}}{\sqrt{S_{xx} S_{yy}}} \\ &= \frac{75}{\sqrt{(42)(147.5)}} \\ &= \frac{75}{\sqrt{6195}} \\ &= \frac{75}{78.7} \\ r &= \boxed{.95} \end{aligned}$$

Step 6: Determine critical level of r at significance level .05

$$\begin{aligned} \text{degrees of freedom} &= n-2 \\ &= 8-2 \\ &= 6 \end{aligned}$$

Consulting a table giving critical values of r, we find that for df = 6 and significance level of .05, critical r = .6215. If the calculated r is greater than .6215, it can be assumed a significant relationship exists.

Step 7: Reach a conclusion

Since the calculated r is .95, the null hypothesis can be rejected and it can be concluded that a significant relationship exists between education level and the amount of volunteer time.

The direction is positive: as education level increases, so does volunteer time. The strength of the relationship is .95, which means 90.25% of the variability of one variable can be explained in terms of the variability of the other variable.

Note: Correlation does not mean causation; a high r just means the variables tends to vary together. A third variable (or many variables) may be at work to produce the observed relationship.

6.0 QUALITATIVE DATA

6.1 What is qualitative data?

In Section 1.1 we talked about some of the differences between quantitative and qualitative data. While quantitative data looks at the incidence and quantity of events, reactions, attitudes etc., qualitative data describes people's reactions and attitudes based on their own words. Data gathered through quantitative methods (such as questionnaires, experimental designs) is measured by means of numbers, percentages or statistical formulas. Qualitative data is gathered through methods like observation, interviewing and document analysis. The results cannot be "measured" precisely but must be interpreted and organized into "themes" or categories.

Qualitative methods of gathering and analyzing data have always been used by anthropologists and historians to study society. This is because qualitative data describes processes, people's interactions with one another, and their thoughts and reactions so much better than quantitative methods. Just imagine Oscar Lewis' classic Life in a Mexican Village filled with statistics, tables and analyses of significance rather than rich descriptive detail.

Over the last few decades evaluators of social and educational programs like PLEI have used qualitative data to describe the impact and effectiveness of their programs. The use of interviews, observation, group methods and document analysis will likely become more commonplace. However, ways of analyzing and giving meaning to qualitative data are still in their infancy. This section describes some of the most common approaches.

Other tools for gathering and analyzing qualitative data can be found in MODULE IV: GATHERING THE DATA. See the sections on Observation, Group Methods, Document Analysis, Interviewing and Other Methods.

6.2 Criticisms of qualitative methods

Most of us do not feel entirely comfortable handling qualitative data. Even when we recognize that statistics are limited, we feel they are more "truthful" than the results of interviews or observations. Funders, too, seem more comfortable with numbers even when these can't (or don't) tell us a lot about how the program is functioning, or the clients' use of PLEI. Criticisms of qualitative data center around two main questions:

- Is qualitative data objective? (or: Isn't qualitative data too subjective, too personal?)
- Can one generalize from qualitative data? In other words, if the results from Program A = X can this also be said for other programs like it?

6.3 Is qualitative data objective?

Objectivity is one of the sacred cows of evaluation research.

Objectivity is traditionally considered the sine qua non of the scientific method. To be subjective means to be biased, unreliable and irrational. (Patton, 1980, 336).

It is a mistake however, to think that using quantifiable data guarantees objectivity. According to program evaluator and writer Michael Patton,

The ways in which measurements are constructed in psychological tests, questionnaires, cost-benefit indicators, and routine management information system data are no less open to the intrusion of the evaluator's biases than making observations in the field or asking questions in interviews. Numbers do not protect against bias; they merely describe it (Patton, 1980, 336).

Just as quantitative data are subject to reliability and validity tests, qualitative data should also be shown to be trustworthy. According to Guba, qualitative data can and should be "reliable, factual and confirmable" (Guba, 1978, 74-75).

6.4 Can you generalize from qualitative data?

One of the criticisms of qualitative data is that one can't make generalizations from the data which would apply to other programs and situations. In other words, you are not able to say, "based on the results of program X it is evident that if the program was applied to other teenagers the rate of delinquency would drop by 10%."

It is now accepted by many researchers that most social programs are too complex and unique to allow generalizations to other programs with complete confidence. Communities, structures, staffing, program goals, design and target groups are simply too different to allow the transference of one model or set of findings to another location. If one can't generalize from qualitative data what use are they? Some evaluators suggest that qualitative data from one program can be applied to other programs but only in the form of hypotheses to be tested and retested.

EXAMPLE:

A program introducing school children (through drama) to PLEI found that rural teachers were less likely to be involved and interested in the teaching materials than teachers from city schools.

A similar program in other provinces took this result into consideration when designing its evaluation study. Specific questions probing interest and commitment to the program were asked of rural and city teachers.

6.5 Usefulness: the primary goal of qualitative data

The primary purpose of qualitative data is not to be "objective" or "generalizable" but to be useful to the stakeholders, whomever they might be.

This perspective makes it clear that the purpose of evaluation research is to provide information that is useful, information that permits action, and information that is relevant to the needs of decision makers and information users (Patton, 1980: 232).

Keep the standard of usefulness in mind when handling qualitative data. Qualitative data cannot be handled in the same way as quantitative data -- by percentages, gross figures, or statistical analyses. Judgement, experience and intuition all play a part in the analysis of an interview or a document. No formal set of rules exists for analyzing qualitative data, comparable to the statistical tests described in sections 5.3 - 5.6 for quantitative data. Nonetheless, there are general approaches to the handling of qualitative data, which are described below.

6.6 Handling qualitative data

There are five general steps in the handling of qualitative data.

- | | |
|---------------|---|
| STEP
ONE | Collect the data |
| STEP
TWO | Review and copy the data |
| STEP
THREE | Describe your data, or sort it into themes, categories or patterns. |

STEP Interpret your data
FOUR

STEP Check the data for "trust worthiness"
FIVE

6.7 Collecting the data

Qualitative data can be collected by means of interviews, observation, document analysis, group methods or through creative approaches like problem stories. Whatever the method, you will likely be left with notes and summaries. Sometimes (if you have done extensive observation or interviews) you will have pages of field notes to analyze.

You will likely have ideas for your major topic areas before you collect your data. As you go along keep a list of topic headings, themes or categories. Revise and expand them. You'll need them later to categorize your data.

The amount of field notes you collect may be overwhelming. You may want to summarize your data collected in documents by using a summary form (see Document Summary Form, MODULE IV). A format for summarizing data gathered from interviews is the Contact Summary Sheet (see below).

This Contact Summary Sheet should be filled out shortly after the interview has taken place. The questions you include are developed from the issues you have addressed in the interview.

EXAMPLE 6: CONTACT SUMMARY SHEET

Date _____

Evaluator _____

1. Who was interviewed: _____

2. Main issues discussed: _____

3. What issues related to the major topic (eq. reorganization of field staff): _____

4. What new ideas were suggested? _____

5. Other relevant comments: _____

6.8 Reviewing your data

Review all your data. Is it complete? Continue to organize it. Make copies of the data if possible, because some data may fit under several themes and may need to be placed under several topic headings.

6.9 Describing your data

Not all your qualitative data can be broken into themes, categories or codes. Much of it will be reported in a descriptive form. A description will include how the program functions, who the target group is, the reaction of program participants and the program's over-all impact. Descriptions can vary in detail. Direct quotes liven up the text. As you collect your data you may want to underline specific passages or quotes which illustrate a theme well. These can be included in your report later if they reflect a significant issue or concern.

6.10 Uncovering patterns

Uncovering patterns in the data is the most important part of handling qualitative data. There are no hard and fast rules for doing this.

This effort at uncovering patterns, themes, and categories is a creative process that requires making carefully considered judgements about what is really significant and meaningful in the data. Since qualitative analysts do not have statistical tests to tell them when an observation or pattern is significant, they must rely on their own intelligence, experience and judgement. (Patton, 1980, 313).

6.11 Coding

Coding data collected from observations, interviews or documents means classifying it under different headings. Coding usually starts in the data gathering stage. Codes can be developed by the evaluator but are sometimes suggested by those being evaluated. Once you have developed your codes then the data must be fitted into it.

SAMPLE CODE

- 1.0 Changes in PLEI knowledge
- 2.0 Changes in Attitudes towards PLEI
- 3.0 Changes in Feelings towards PLEI
- 4.0 Changes in Behaviour
- 5.0 Changes in Skills

A code such as this can be used to "annotate" the material you have collected (through interviews and observations). After you have codified the material you can add up the types of responses. An example of a section of a coded interview follows.

EXAMPLE 7: CODIFYING INTERVIEW NOTES	
Interview notes with Sally Smart (transcribed from taped interview) July 23, 1982	
Yes, I learned a lot about what to do. You see, my husband always beat me and I was afraid. I didn't think anyone could help me. When I saw Mr. White at Family Court he said there were things I could do. First, I went to get a Court Order. I didn't think it would work but it did. I was so scared ... well, I'm still scared, and so are the kids, but I feel safer now. At least, I can do something if Bob comes back....	1.0 Knowledge 2.0 Attitude 4.0 Behaviour 4.0 Behaviour 3.0 Feelings

Codes vary in complexity according to the number of subjects which you are investigating.

EXAMPLE 8: SAMPLE CODE FOR QUALITATIVE DATA ANALYSIS

1. Program Description

- 1.1 Type of program
- 1.2 Purpose
- 1.3 Goals
- 1.4 Funding
- 1.5 History
- 1.6 Staffing
- 1.7 Administration

2. Client Needs

- 2.1 Counselling
- 2.2 Custody settlement
- 2.3 Information on court process
- 2.4 Support

3. Program Outcomes

- 3.1 Changes in confidence levels
- 3.2 Awareness of court process
- 3.3 Action to protect against spouse
- 3.4 Liaison with welfare

Another way to code material is to use the FILE BOX.

EXAMPLE 9: THE FILE BOX

1. Purchase some lined index cards, a small plastic file box, and some dividers for the cards (you'll need one for each topic).
2. Write the codes on each divider.

Example: Reactions of program participants to program
Reactions to published materials
Reactions to telephone line
3. As you review your notes write each piece of data on a separate file card. ("S.S. got court order on June 1, 1985") Write the date and the source of the piece of data on the file card.
4. File under the appropriate section in your file box.

6.12 Case Studies

6.12.1 Description

One way to categorize and analyze qualitative data is by using a case study. A CASE STUDY brings all the information together from many sources (e.q. interviews, records, documents, statistics) into an in-depth examination of an individual's experience of a program. Case studies allow for the reader to "enter into" the situation and become aware of the complexity and interrelationships involved. For example, the issue of how PLEI is used in the lives of the target group members might be addressed effectively by doing a number of case studies of individuals.

6.12.2 Advantages and disadvantages

The advantages and disadvantages of case studies are summarized in Table 8.

TABLE 8: ADVANTAGES AND DISADVANTAGES OF CASE STUDIES
ADVANTAGES: ● Case studies provide-indepth information. They can describe subtleties and relationships more effectively than qualitative data. ● Case studies are grounded in real experience. ● Case studies can look effectively at change over time. ● Case studies dramatize situations. <u>For this reason they may have a lot of political impact</u> (in an evaluation report).
DISADVANTAGES: ● The information in a case study can be presented in an over-simplified or overexaggerated way. ● Skill is needed to collect, edit and present a case study. Since this is a relatively new method the process of developing case studies has not been well defined. ● There may be difficulties in protecting the anonymity of those featured in a case study. ● Case studies may arouse stronger reactions than do most evaluative data: this may present problems with groups like funders.

6.12.3 How to do a case study

STEP ONE Determine the purpose of the case study and the number of cases you will be examining.

EXAMPLE: Case studies will be conducted using ten seniors who attended a two day forum on "Seniors and the Law." The issue which will be addressed is HOW the seniors experienced the Law Forum and how they used the law information they acquired for a six month period after the forum.

STEP TWO Select the sample and assemble all the information which relates to each case.

EXAMPLE: Case studies are built up out of information from a wide variety of sources: records, documents, interviews, statistics, questionnaires, etc. In the case above (studies of the ten seniors), the following methods were used to collect data:

attendance records at Law Forum.

client satisfaction questionnaires were filled out by each client.

each client was interviewed in person two times: once 2 months after the forum, then 4 months later.

STEP THREE Arrange the data in a coherent fashion, either chronologically (through time) or by themes. Themes for the above example might include:

previous reactions to the law
changes in attitude towards the law
retention of legal information at 2 months, 4 months, 6 months

The material must be edited, and redundant information eliminated. The case study can be illustrated by quotes from the subject or comments can be paraphrased.

Be as concrete and exact as possible when describing events or experiences:

EXAMPLE:

POOR

Mr. Brown has gone to a few workshops.

GOOD

Mr. Brown attended 3 workshops--one on labour legislation, one on writing wills, and one on consumer protection.

STEP Check the material for accuracy. You may want to cross-check
FOUR contentious issues by finding at least one other source to verify
them or ask the subject to read the case study to confirm the
facts.

STEP Write out the material or present it through some other medium:
FIVE film, video or records.

6.12.4 Case Study Example

What was the impact of the senior's law forum? The following case study (one out of a total of ten) illustrates the impact on one person -- Mr. Al Browning (not his real name).

PREVIOUS ATTITUDE TOWARDS THE LAW AND LAW RELATED ISSUES

Mr. Browning is a 59 year old metalworker from Aardvark Company, a long time union member who was permanently laid off after 26 years of service in June 1985. He feels he is entitled to a lump sum settlement from the company of \$5000-\$7500. He has had no dealings with lawyers -- in fact, feels uncomfortable with them.

This was the first time he had ever had a legal issue to resolve and he felt embarrassed about his vulnerable economic position. He was suspicious of what he perceived as welfare groups, although he was angry about his own status. Mr. Browning also hoped to acquire enough information at the forum to write his own (and his wife's) wills.

A second reason for attending the forum was because of his own lack of focus since his layoff. "My wife says all I do is sit around and watch tv." She urged him to attend in order to give "me something to do".

EXPERIENCE AT FORUM

At first Mr. Browning was put off by the cost of the forum (\$25). He did not complain to the coordinator but felt this discouraged unemployed people from attending. He also initially felt that the people in charge were a "little young" to understand his dilemma.

He attended three workshops: one on labour legislation, one on writing wills, and one on consumer protection.

He found the morning workshops on labour legislation very useful, primarily because he was in a small group where he was able to ask specific questions about his situation (rights to compensation under a union contract). In the group he met another man from a construction company who had also been laid off. However he was uncomfortable during a discussion of unemployment insurance because of his own feelings about UIC -- "It's freeloading and I've always paid my way." He was affected emotionally when a man much younger than himself on the panel described his own lack of legal recourse after being fired. It was at this point that he began to see the law had a human dimension. "I'd always been put off by people who were into human rights stuff. But for me and this guy, we may end up on welfare -- we aren't to blame."

Mr. Browning attended two more sessions of the forum. He found the presenter of the wills workshop hard to understand -- "There was a lot of material and paper he kept waving about. I just couldn't get it straight." He bought the wills booklet to take home and read.

He attended the workshop on consumer law but left because "it was dealing with stuff like how to buy a car. I don't need that kind of information." By then, "I was really tired -- that room was crowded and hot, so I went home."

USE OF LEGAL INFORMATION

Two months after the forum Mr. Browning had retained most of the information he had acquired about labour legislation (his rights for compensation). He had written a letter to the company and his union and a meeting had been set. He felt he could handle this himself and did not need a lawyer. He also had met with another participant at the forum a few times socially and they had gone down to the Unemployment Action Centre to see if they could get some free legal advice. They were referred to the Law Clinic and Mr. Browning's presentation to the company was reviewed by a law student.

He was also given some pamphlets on "How to Obtain UIC". He was still resisting this and had not read the material, although his wife was urging him to apply. He had also done nothing about drawing up a will although his wife was urging him to go to a lawyer. He planned to read the PLEI booklet on wills before he went.

SIX-MONTH UPDATE

The meeting between the company, union and Mr. Browning was held. Prior to the meeting, Mr. Browning drew up a proposal which was reviewed by the Legal Clinic. He used material gathered at the forum. Four others from the same company who are in the same position approached him for advice. They plan to meet and form a lobbying group. For Mr. Browning this is a support group too. "With my old friends who still have their jobs, I just can't relate to them anymore."

No plans have been made to draw up a will. "I guess I should but it's all a mystery to me." He started to read the wills pamphlet but it was "kind of hard to understand -- where do you get all those forms?". However, he understands that the Legal Clinic may help him with this and he stops in there "about once a month." The last time he picked up some material about child custody "for my daughter. She's in the middle of a messy divorce and can't really afford a lawyer."

6.12.5 How to use case study information

How can the information in this case study be used? Some concrete facts come through which can be corroborated with other sources of information, such as:

- the cost of the forum was an impediment to certain groups.
- the speaker at the Wills workshop didn't present the information in terms that were easy to understand by a lay audience.
- the physical setting for some of the workshops was uncomfortable.

The case study information also suggests the following:

- that people pick up legal information more easily if it directly relates to their lives.
- people need to be able to ask specific questions about their situation in legal information sessions.
- personal connections as well as human support are important -- information forums should contain time for personal contact and discussions.
- attitudes are changed by human experience.

The conclusions can be corroborated by other evaluative data or by looking at the experiences of others covered through case studies. However, generalization, in a specific sense, is not the real purpose of case studies.

When explanation, propositional knowledge and laws are the aims of an inquiry, the case study will often be at a disadvantage. When the aims are understanding, extension of experience, and increase in conviction in that which is known, the disadvantage disappears. (Stake, quoted in Guba and Lincoln, 1981, 376).

6.13 Matrix (displays)

Description, coding and case studies are ways of presenting data in a narrative form. Another effective way of categorizing data is by the use of matrices -- visual displays of the data. Some of these are described in MODULE IV (See structured observation methods).

Matrices come in all types, shapes and sizes. They can be organized around specific issues and can describe program components or issues within a single program. They can compare data from several programs. Matrices enable you to "eyeball" data quickly, to analyse them, to combine data and to report findings. Sometimes you can enter data in a matrix as you collect it. The problems with matrices relate to their rigidity. They can only contain so much data -- the rest has to be excluded.

Matrices are best organized around a single concept such as time, roles, effects, or critical incidents. Don't worry if your matrix topics change as you go along. This is natural.

Two examples of matrices follow. They use a combination of verbal summaries and symbols to express the data that has been collected.

EXAMPLE 10: MATRIX SHOWING USE OF PLEI MATERIALS IN PUBLIC LIBRARIES. (DATA GATHERED FROM OBSERVATIONS, INTERVIEWS AND OPEN-ENDED QUESTIONNAIRES)					
Library	Level of Collection	Use of Material	Displaying of Material	Librarian response	Publicity
Happy Valley	A	Very frequent	Very visible location	Very excited; Little expertise	Yes-Library Day and posters used
Oakland	A	Frequent	Very visible location	Dis-interested; no trained staff	None
Three Pines	B	In-frequent	Obscure location	Volunteer; Interest but little time	None
Walnut Grove	B	Very in-frequent	Obscure location	Trained staff ex-paralegal; proud of collection	Some work-shops
Garry Oak	C	In-frequent	Quite visible location	Trained staff & volunteer interest; few funds	None
Wilderness Park	E	Very in-frequent	Obscure location	No staff responsible; poor funding; no interest	None

EXAMPLE 11: TIME-ORDERED MATRIX (DATA GATHERED FOR INTERVIEWS WITH KEY STAFF AND DOCUMENT ANALYSIS)				
	Planning Period	First Year	Second Year	Third Year
	June-Dec, 1979	1980-81	1982-83	1983-84
Relations with agencies		Native Friendship centre writes letter criticizing centre	Meetings with native org. to improve services	Regular "feedback" session developed
Board development	Initial meeting of Society Planned	Board elected - one member of client group	3 members of target group elected at AGM	Board development seminar planned
Relations with Bar Assoc.	Met with President local bar concerned about citizens doing own legal work	Lawyers meet with board - express concern about clients going to program - receiving legal advice	New Bar Assoc. president. President met - more interested in support	Lawyer recruitment - 5 new volunteers
Media Support	Called press conference - discussed program	3 articles on Youth & Law accepted Newspaper changed ownership - end of collaboration	No change	TV & Radio approached. Plans for Cable TV presentation
Policy Regarding Eligibility	Open policy - anyone can register for programs	Target group policy discussed	Goals changed Women, Native People main clients	Funders request policy review

6.14 Interpreting qualitative data

Many people have difficulty interpreting qualitative data. Adding up numbers and figuring out percentages seem more clear cut than understanding results of an interview or extended observation. Remember that the value of qualitative data lies in its richness and comprehensiveness. The patterns and connections you make will likely not be linear (ie., this cause equals that effect) but will portray the program more holistically. Here are some ways to look at qualitative data and draw conclusions from them. The following categories are described by Miles and Huberman in Qualitative Data Analysis [1984].)

6.14.1 Themes and patterns -- as you collect and categorize your data certain themes and patterns will become prominent. How do you know what they are? There are no rules for determining themes. Sheer repetition of the data will suggest them as will your own intuition and judgement. Usually themes jump out at you if you are familiar enough with your data.

6.14.2 Counting -- Don't use counting to discover your themes or central concepts but after you've determined them you can use counting to see if they are as dominant as you think. How many times did staff mention they felt frustrated at staff meetings? How many program participants disliked the videotape?

6.14.3 Plausibility check -- Miles and Huberman (1984) say that checking to see if a conclusion is plausible or "makes sense" is one way to verify data. Does this analysis sound "right"? Does it "fit"?

- 6.14.4 Clustering -- Clustering the data into categories or "classes" is a natural way to find meaning. What things are like each other and what are not?

"Clustering is a tactic that can be applied at many levels of qualitative data: at the level of events, of acts, of individual actors, of processes, of settings/locales, of sites as wholes. In all instances, we are trying to understand a phenomenon better by grouping, then conceptualizing objectives that have similar patterns or characteristics". (Miles & Huberman, 1984, 218).

- 6.14.5 Splitting variables -- as the data is collected and categorized, meaning can be found by breaking it down into more categories. For example, you may discover that instead of 6 ways program participants use PLEI data - there are 12 ways. Don't differentiate your data into categories which are too small. Remember you are splitting variables in order to find new meanings.

- 6.14.6 Noting relationships between variables -- What relationship exists between variables? Relationships are often found by examining a matrix. What seems connected with what? Remember qualitative data doesn't usually suggest direct cause and effect but inter-connections.

- 6.14.7. Building a logical chain of evidence

Data can be arranged into a pattern which "makes sense", a logical chain of evidence.

- (1) an outreach PLEI coordinator might be committed to publicizing the program which should
- (2) increase the commitment/interest of teachers in rural areas which should
- (3) involve them more in planning PLEI materials and
- (4) attending workshops and
- (5) promoting PLEI topics relevant to rural areas.

To build a chain of evidence, several sources independent of each other should suggest the same result and suggest the links. The evaluator should be able to find proof of the conclusions in other sources. Conflicting evidence must be explained and the "relationship must make sense".

6.14.8 Building theories

After the data has been organized, clustered, or interconnected, it is useful to see if any theories or over-arching concepts can be developed with which to describe the data. Are there enough similarities in the response patterns of PLEI users to describe some general response patterns? Can these be applied and tested out with other PLEI programs? Such theories are helpful but may not always be apparent.

6.15 Testing qualitative data for trustworthiness

Qualitative data cannot be subjected to tests of significance or standard reliability and validity checks. How can you check for its trustworthiness? Patton (1980) suggests the following methods:

6.15.1 Look for competing themes -- look for data which supports alternative conclusions to the one you've reached. If you find little to support another conclusion, then yours is probably correct.

6.15.2 Examine negative cases -- search out examples and cases which do not fit in the over-riding patterns. If most program participants are satisfied, what about those who are not? The examination of negative cases can provide valuable insights into the data. Have a part of the report deal with the negative cases -- it will make your conclusions more realistic and interesting.

... the section of the report that involves exploration of alternative explanation and consideration of why certain cases do not fall into the main pattern can be among the most interesting sections of a report to read. When well written, this section of a report reads something like a detective novel in which the evaluator (detective) looks for clues that lead in different directions and tries to sort out which direction makes the most sense given the clues (data) that are available (Patton, 1980: 328-29).

6.15.3 Triangulation -- Triangulation means the checking out of data by using one or more sources. You can do several types of triangulation:

- P a) Comparing data collected by qualitative methods with that collected by quantitative methods.

EXAMPLE: The interviews suggest one series of workshops is enjoyed more than another. Do attendance statistics also reflect this?

- b) Comparing several sources of qualitative data. For example:

- observation and interview data.
- document analysis and interview data.
- comparing data over several interviews
- comparing what different people have to say about the same thing.

- c) Using several observers or interviewers to look at the same data.

Triangulation does not guarantee completely consistent data.

Triangulation is a process by which the evaluator can guard against the accusation that a study's findings are simply an artifact of a single method, a single data source, or a single investigator's bias. (Patton, 1980: 332).

6.15.4 Review data for sampling errors and distortions

There are several types of sampling errors which can occur in evaluative data.

- a) Not all situations/events might have been observed.
- b) Not all time periods may have been observed. An unrepresentative time period may have been observed.
- c) There may have been an unrepresentative group of people selected.
- d) The evaluator's bias may have distorted the data.

Review your data and the reasons why you collected the data as you did. You may have chosen to observe certain events or people for specific reasons. State why this was so. Your data may be "distorted", but for a purpose. The "distortion" may mean your conclusions must be limited only to the subjects you have studied.

An evaluator (whether using quantitative or qualitative methods) always affects the study. It is important for evaluators to document possible effects and to check these out with program staff. You might ask, "Are people acting differently because I'm here? In what ways?"

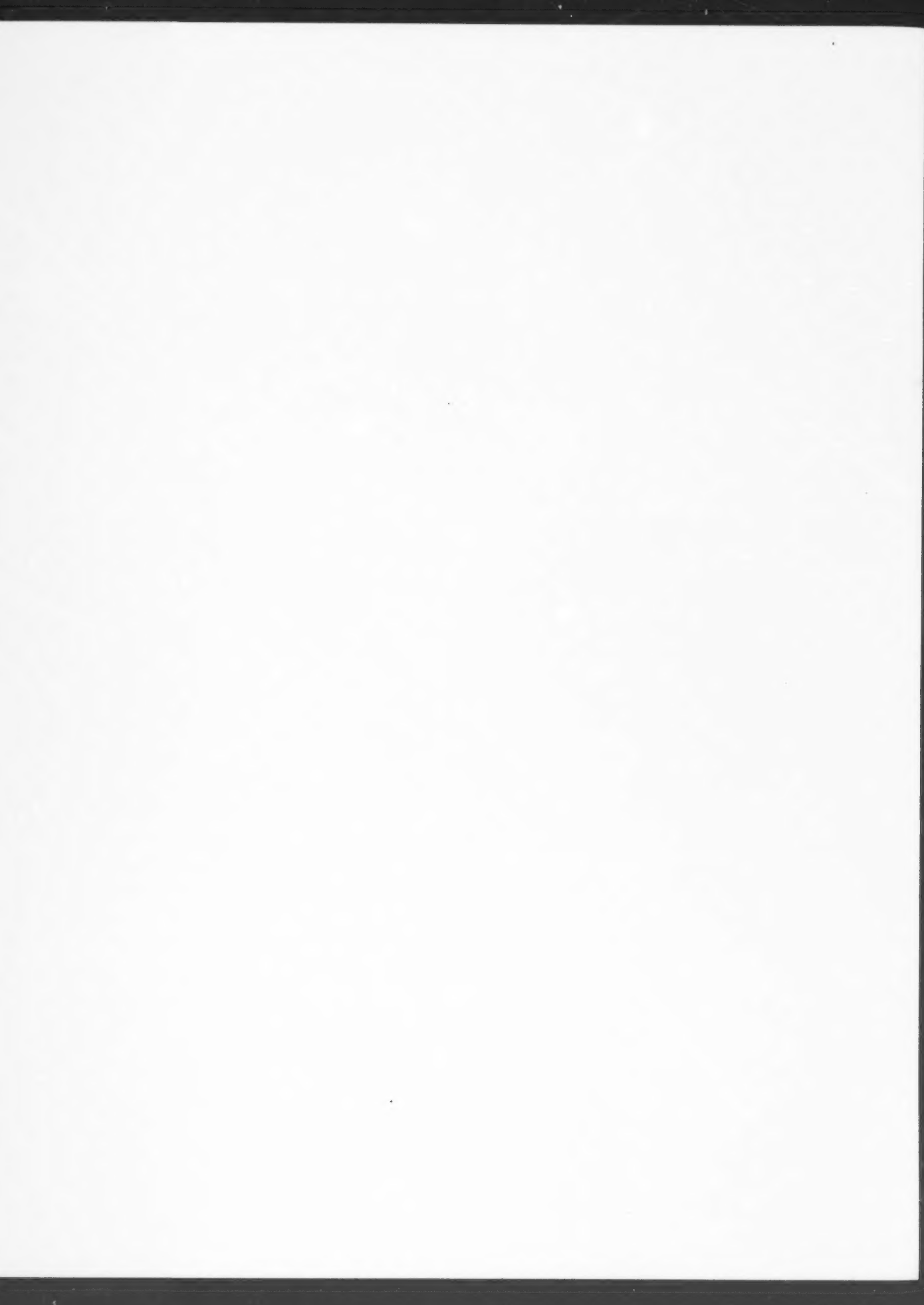
The understanding of qualitative data requires as much thought and analytical skills as quantitative data. The problem is learning to trust and check out one's own judgement and interpretations. There are no formulas to follow.

The task is to do one's best to make sense out of things. A qualitative analyst returns to the data over and over again to see if the constructs, categories, explanations and interpretations make sense, if they really reflect the nature of the phenomena. (Patton, 1980: 339).



MODULE VI

WRITING AND UTILIZING THE FINAL REPORT



MODULE VI

WRITING AND UTILIZING THE FINAL REPORT

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1.0 THE WRITING PROCESS

You have completed the evaluation process -- defined the problems, designed the methods for gathering data, gathered and analyzed the data and now you are ready to write your report. Your desk is littered with files, notes, statistics and documents. How do you make sense of it all?

STEP Determine the information needs of your group:

ONE

What kind of information and format is most appropriate for your audience? Is the report going to a government body or to a program co-ordinator? Does the future funding of the program rest on your findings or is only the staff interested in the results? Answers to these questions will determine your presentation. You can write a lengthy formal report or present a summary of findings. You can give a joint oral presentation with staff or can enhance the presentation with photos or a visual display. Ideally, the method of presentation should already have been dealt with during the contract negotiation stage.

STEP Review your material. Read over your notes, documents, and TWO data. Organize it into files according to subject.

STEP Make a rough outline of your report -- Make a very general THREE outline of the topics you want to cover. An evaluation usually follows a standard design (See section 3). You may use all or only some of these headings.

- STEP
FOUR Begin your first draft. If your report is short or if you have limited time your first draft may be your final draft. Some people can write an accurate first draft and then undertake only minor corrections. Another strategy is to write a very quick first draft. SIMPLY GET YOUR MAJOR IDEAS DOWN IN PRINT. Don't worry too much about completeness, organization, or style at this point. This is a good method if you haven't figured everything out but are in a rush. The "fleshing out" of ideas can come later.
- STEP
FIVE Revise the outline -- Go back to the outline and break it into sections, adding more detail. Reorganize the sections if necessary.
- STEP
SIX Start rewriting. Move the sections around. Cut and paste if necessary. Look at one section at a time. Don't be overwhelmed by the enormity of the task. Set deadlines section by section.
- STEP
SEVEN Review major conclusions and recommendations with the target group. If you have been working collaboratively with your group your conclusions should not be a surprise. Even so, you should review them with the recipients of the report. You may have agreed to submit "a draft report." Don't do this unless you have the time and capacity to incorporate feedback. Ask for people to give you feedback in specific areas. ("Please tell me whether you think the recommendations are feasible, not whether I've made spelling mistakes".)
- STEP
EIGHT Write the final draft. Don't forget about the "little" items -- a Bibliography, a numbered Table of Contents, and an Executive Summary (if the report is over 20 pages).

STEP Edit the report, correcting spelling, punctuation and grammatical
NINE errors. If possible, find someone else to review the report:
 most people aren't very good editors of their own work.

2. WHAT MAKES A GOOD EVALUATION REPORT?

What makes a good evaluation report? Jerome Murphy in Getting the Facts: a Fieldwork Guide for Evaluators and Policy Analysis (1980) states that a good evaluation report is valid, trustworthy, fair, well written and useful. Here are some more ways of checking out these qualities:

2.1 Validity

● Is your report accurate? Are statistics correct? Has evidence been cross-checked and verified by at least two sources?

● Is your report as unbiased as possible? Is your report objective? Have staff people gathered data on programs other than their own? If there is a point of view, is it clearly stated?

● Does the report deal with significant issues? Have you probed issues instead of skimming the surface? Are difficult and unpopular issues examined as well as the more obvious ones?

● Is your report reasonably complete? Have you dealt with all the key issues? Have you addressed the issues of most concern to the stakeholders?

● Is your report logical? Does your report make sense? Do conclusions stem from evidence and logical arguments? Are the topics taken up in a logical order?

2.2 Trustworthiness

● Can the reader trust the data in the report? Does the data seem logical and does it make sense? Even small incorrect details (a wrong date, incorrectly added statistics, an incorrect historical fact) can make readers doubt other parts of the report.

● Is your data documented? Are major conclusions or assertions backed up with facts, either yours or those from other sources? Are sources and quotes identified? Are references documented?

● Do you show how you have minimized bias? Do you clarify your point of view if it intrudes?

● Do you point out alternate conclusions or ways data might be interpreted? There is no one way to interpret data. A trustworthy evaluator provides different options.

● Do you describe the limitations of the evaluation? Every report should acknowledge the weaknesses and limitations of the design. Such limitations always exist -- don't be ashamed of them - simply describe them openly.

2.3 Fairness

An evaluation can have a chilling effect on a program, its personnel, and clientele. It can cause embarrassment, expose secrets, violate privacy and destroy reputations. (Murphy, 1980, 175).

● No matter how critical your evaluation findings, it is important that they be stated with respect and fairness. A program may be poorly designed and haphazardly implemented, but the staff have usually expended energy and commitment. This should be noted in the report.

- When the data is likely to have a negative impact on individuals, have you let staff and others know beforehand? Avoid being overly judgemental (or seeming to be) in the report - be concrete and critical and stress ways things could be improved.

- If your recommendations and conclusions are controversial provide staff with a place for rebuttal. For example, staff could be given your report in advance. They would not be given permission to alter your report, but before it is published for a wider audience, the staff could add a chapter or preface which contains their rebuttal of your conclusions.

- Honour any confidential sources which you have used to gather the data. Change names and situations if necessary, to protect sources which may be harmed by the report.

- Be aware of the possible uses of your report. Perhaps the funder has called for the evaluation because he wants to find reasons for ending the program. Don't change your content because of this but be aware that a carelessly worded sentence can be taken out of context. In these circumstances (where you know there is a hidden agenda) it's best to address the issue directly: "Is this program worth refunding? Why? On what basis?"

2.4 Writing quality and organization

- Be concrete. Try to use specific examples and specific wording wherever possible.

- Avoid jargon. Readers will be put off by a report which is full of technical evaluation terms.

- Vary your style and use grammar correctly. Avoid too much use of the verb "to be." Don't overuse pronouns. Don't use vague objectives -- be precise.

- Write the report in the past tense.

- Don't use the pronoun "I" in the report (the use of "we" is sometimes acceptable). Instead use the passive voice. "The staff was interviewed at three different times". Don't overuse the passive voice. It isn't always necessary to use it. Rather than "PLEI needs were defined by staff," write "Staff defined PLEI needs".

- Organize the report into categories that are meaningful to the reader. Break the content into sections with good descriptive headings.

- Have a well developed Table of Contents with page references so readers can find sections easily.

- If the report is over 20 pages include an Executive Summary at the beginning. Don't make it over 2-3 pages.

- Highlight recommendations. If you have about 7 or more recommendations you will probably want to list all of them at the beginning of the report.

- Write a lively report! Use short and long sentences, interesting quotes and analogies. Inject some humour. An evaluation report should be interesting as well as informative.

2.5 Usefulness

- An evaluation report must be timely in order to be useful. There's no point having a report if decisions about the program have already been made.

- An evaluation should address the needs of the stakeholders. They won't always like what you have to say, but the issues you address should be relevant to them.

2.6 Appearance

A colourful cover with coloured sheets inside the report to break up sections enhances the content. Use lettraset for headings and for a cover title -- it is easy to use, comes in a variety of types and copies well. Don't crowd material together. Use headings, indentations and italics to break up print. If the report is large use coil binders so the pages will lie flat. Most large copying centres have a variety of papers, colours and coils to choose from. Present your data in interesting ways -- by using line and bar graphs, distribution charts, flow charts or boxes.

If your report is short it will probably be typewritten, but for longer reports which may require revisions, consider using a word processor. Although the initial costs of using a word processing service are high, you will likely save in the long run.

3.0 EVALUATION REPORT OUTLINE

The following topics are usually covered in a standard evaluation report. You may want to vary the content and order somewhat.

[Title Page, Table of Contents, Appendices, List of Tables, Acknowledgements].

Section I

Executive Summary - is for people who are too busy to read the whole report. It should be 1-3 pages long. Although it comes first, write it last. If the report is under 20 pages you probably won't need it. An executive summary usually looks at:

What was evaluated and why
The major conclusions and recommendations

Section II

Background Information

- provides background leading up to the evaluation.
- describes program history, goals, funding, target group structure, functions and staffing (can be general or detailed). These aspects should be checked out with the staff for accuracy.

Section III

Description of the Evaluation

This section describes:

- the reasons for doing the evaluation, the motivators.
- the major stakeholders and how they were consulted.
- constraints on and limitations of the evaluation.
- the issues addressed by the evaluator.
- major evaluation goals.
- the evaluation design - why chosen, limitations.
- data collection, methods and procedures -- reasons for
- reliability and validity issues.
- how data was collected, over what period, training.
- methods of analyzing data.

Section IV

Evaluation Results

- Numbers of people interviewed or surveyed in evaluation.
- Results of data collection - what were the outcomes, impact etc?
- What did program look like?
- Were there unanticipated results?
- Discussion of results -- Did the program cause the results? Was the program effective? Did it meet its goals?

Section V

Conclusions and Recommendations

- Major conclusions about the effectiveness of the program or program component are discussed. How certain are these conclusions? What has not been considered?
- What recommendations stem from these conclusions? Recommendations can be included in the report within the appropriate section or can stem from the conclusions.
- Final thoughts on the evaluation and future evaluations. Has the evaluation addressed the issues? Does more need to be done?

Section VI

Appendices

- May include copies of questionnaires or interview schedules, statistical information, program documents or other reference material important to the evaluation but not important enough to go into the text.

Bibliography

- You should list the sources you have used to compile the evaluation results such as books, major program material (reports etc.), other research studies and articles. You may want to list whom you have interviewed or organizations you have contacted.
- Formats for developing a bibliography can be found in most dictionaries (see footnotes at the back) or in style manuals such as W. Campbell and S. Ballou, Form and Style, (Boston: Houghton Mifflin Co., 1978).

4.0 ALTERNATIVE WAYS OF PRESENTING EVALUATION DATA

Evaluation data does not always have to be presented as a final report. Here are some alternatives.

- Make copies of the Executive Summary and distribute them to Board Members or other Stakeholders.
- Develop a "news release" describing the evaluation and some of its more important conclusions. Send them to stakeholders and evaluation participants.
- Present the report orally to a large or small meeting of staff, stakeholders, funders, or community members. Use flip charts or graphics to describe conclusions. Include a question and answer component. You might consider a joint presentation with a staff member.

- Spice up the oral presentation of the evaluation by including photographs, drawings (appropriate when children are the target group), video, slide or drama presentation. Involve program participants in the presentation.

5.0 UTILIZATION OF THE EVALUATION DATA

Just as decision makers live in a world of uncertainty, so too evaluators are faced with the ever-present possibility that despite their best efforts, their work will be ignored. The challenge of producing good evaluation studies that are actually used is enormous. (Patton, 1978: 291.)

Evaluators and groups are usually poor at disseminating evaluation results. After the program administrators and funders have read the report it often gets filed away. Sometimes new staff are unaware that evaluations of their programs have even been done. Quite often this is because the evaluation study was irrelevant to the organization. Sometimes the report is boring or hard to understand. Political pressures may keep the report from being widely distributed. This is especially true if the report is critical of the program.

After the evaluation has left the evaluator's hands it is no longer up to him what happens to it. If the program stakeholders have been involved in developing the evaluation and seeing it through, the results are more likely to be utilized. Program staff can disseminate the information to staff administrators and program participants through a variety of means (summaries, bulletins, inclusions in newsletters, by oral presentations etc.) The evaluator can promote the evaluation by informing other organizations and governmental bodies that it is available. Journals such as the Canadian Evaluation Society (CES) might welcome review of comprehensive evaluations. Evaluators and staff can make joint presentations on their findings at workshops, conferences and seminars.

AN ANNOTATED LIST OF OUR

"TOP NINE"

MOST RECOMMENDED SOURCES



AN ANNOTATED LIST OF OUR "TOP NINE" MOST RECOMMENDED SOURCES

1. Levin, Henry M. Cost-Effectiveness: A Primer. Beverly Hills: Sage Publications, 1983. (168 pp)

This is exactly what the title promises to deliver: a practical, short and understandable book on cost effectiveness. Although all of Levin's examples are drawn from the education field, it would be useful for orientating PLEI groups. Levin deals with costing all aspects of a program, and clarifies the difference between cost-benefit, cost-effectiveness and cost-utility analysis. The latter two approaches are of particular relevance for PLEI groups.

2. Abbey-Livingston, Diane and David S. Abbey. Enjoying Research. Toronto: Government of Ontario, Queen's Printer, 1982 (274 pp).

This manual is written for people. A very readable and entertaining manual about all aspects of needs assessments, from the planning stage, selecting your sample, designing and administering questionnaires for surveys and interviews, researching attitudes, and analyzing research results. It includes a booklet on inferential statistics. Although the focus is on needs assessment and examples are discussed from the recreation field, most PLEI groups would find this manual useful.

3. Dillman, Don A. Mail and Telephone Surveys: The Total Design Method. New York: John Wiley and Sons, 1978. (325 pp).

Head and shoulders above any other book on this subject. Although written for professionals involved in surveying, it is easily understood by the layman. Its orientation is to large scale (national and state-wide surveys), but the countless examples and detailed discussions on writing questions, constructing mail and telephone questionnaires, and implementing surveys would be invaluable to any PLEI group contemplating a major survey. A warning: it is extremely expensive (\$73. Canadian, unless you can work a deal with your bookstore!)

4. Rossi, Peter and Freeman, H. Evaluation: A Systematic Approach (Second Edition). Beverly Hills: Sage, 1982 (351 pp).

Everyone interested in evaluation needs one standard text in their library and this is one of the best. Rossi's book deals with the basics - planning evaluations, program monitoring, impact assessment, experimental and non-experimental designs. Evaluation methods are described in depth and can be technical. A real asset of the book is the many examples of evaluation designs and strategies. They make the fairly academic style come alive. You won't want to read Rossi from cover to cover, but it's an excellent reference text, particularly if you're doing an evaluation based on quantitative methods.

5. Patton, M.Q. Qualitative Evaluation Methods. Beverly Hills: Sage, 1980.

If a reward was offered for the most enjoyable evaluation books on the market, Michael Quinn Patton would surely win it. Patton practices what he preaches -- evaluation should be useful, relevant and understandable. In this book he concentrates on the importance of qualitative evaluation and describes several methods in detail (observation, interviewing). If you need reinforcement about the merit of a qualitative approach then this book is for you. He discusses evaluation in the real world (with its uncertainties and conflicts) rather than the theoretical. The book contains good case examples from program evaluation. It also has lots of humour.

6. American Council of Voluntary Agencies for Foreign Service, Evaluation Sourcebook. New York: 1983, (166 pp). Available from ACUAFS, 200 Park Avenue South, New York, N.Y. 10003.

This is a book about evaluation developed for a specific target group -- organizations doing foreign aid projects. However, its content, which is based on participant involvement, makes it worthwhile reading. Sometimes the perspective is unfamiliar, as in the description of the primary evaluation "persuasions". An important contribution is the discussion of fourteen useful evaluation tools; some of these are creative and interesting (e.g. problem stories, diaries). Material in other sections (e.g. Selecting an Outside Consultant) is also very good. The approach is primarily qualitative. Don't look to this book for a good grounding in the evaluation process.

7. Kosecoff, J. and Fink, A., Evaluation Basics: a Practitioner's Manual. Beverly Hills: Sage, 1982.

This is another basic evaluation text, more simplified than Rossi but useful just the same. Without a lot of frills, the book discusses the basics of issues like sampling, designing questionnaires, handling statistics and evaluating attitudes. There is lots of material to enlarge upon the text (an evaluation planning chart, sample budget, how to read an ERIC print-out). Statistical examples are provided throughout. Many program examples but most are from the health field. Evaluation Basics is based on a more traditional, quantitative approach to evaluation.

8. Guba, Egon and Lincoln, Yvonna. Effective Evaluation: Improving The Usefulness of Evaluation Results Through Responsive and Naturalistic Approaches. San Francisco: Jossey - Bass Publishers, 1981.

If you are planning a qualitative evaluation then this book will reaffirm the value of the qualitative or more "naturalistic"

approach. Guba and Lincoln discuss the importance of involving the stakeholders, the naturalistic evaluation process and how to gather "trustworthy" data. Responsive methods like observation, interviewing, document analysis and case studies are discussed. A pleasant book to read, it emphasizes the importance of evaluation being relevant and non-alienating to the group involved. In April 1985 the same authors published Naturalistic Inquiry (Beverly Hills: Sage Publications Inc), which promises to take naturalistic methods several steps further.

9. Canadian Law Information Council. CLIC Abstracts on Public Legal Education and Information (PLEI) Research. Toronto: Canadian Law Information Council, 1983.

The title is exactly what this document is. Undoubtedly the best source in North America to help you find out what studies have been done on or by other PLEI groups. Each entry is condensed into two pages, one giving 2 or 3 word summaries of authors, publication data, type of research, target groups etc., the other a synopsis of the objectives, methods and results of each study, plus added comments. The descriptive key to the abstracts is excellent, so you have access to relevant abstracts from almost any beginning point you can think of. It is intended that the abstracts will be updated yearly. There are 250 of them at the time of writing.



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